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THE SEVENTH REGIMENT ARMORY ON PARK AVENUE

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***State Records Review***

The following state records were reviewed to determine the presence of hazardous waste at the project site and within the established search radii:

- State Hazardous Waste Site list
- State Landfill/Solid Waste Facilities list
- State Storage Tank lists
- Toxic Release Inventory (TRI)
- Facility Index System (FINDS)
- Air Discharge Facilities
- Toxic Wastewater Discharges
- Spill Information Database

Three tanks are listed at the project site on the NYSDEC Petroleum Bulk Storage (PBS) Underground Storage Tank (UST) and Aboveground Storage Tank (AST) lists. The relative location of these tanks is presented in Figure 2 below.

A 4,000-gallon steel/carbon steel UST, vaulted, with access, is located in the basement of the armory. This tank, installed in July, 1968, is used to store No. 1, 2 or 4 fuel oil.

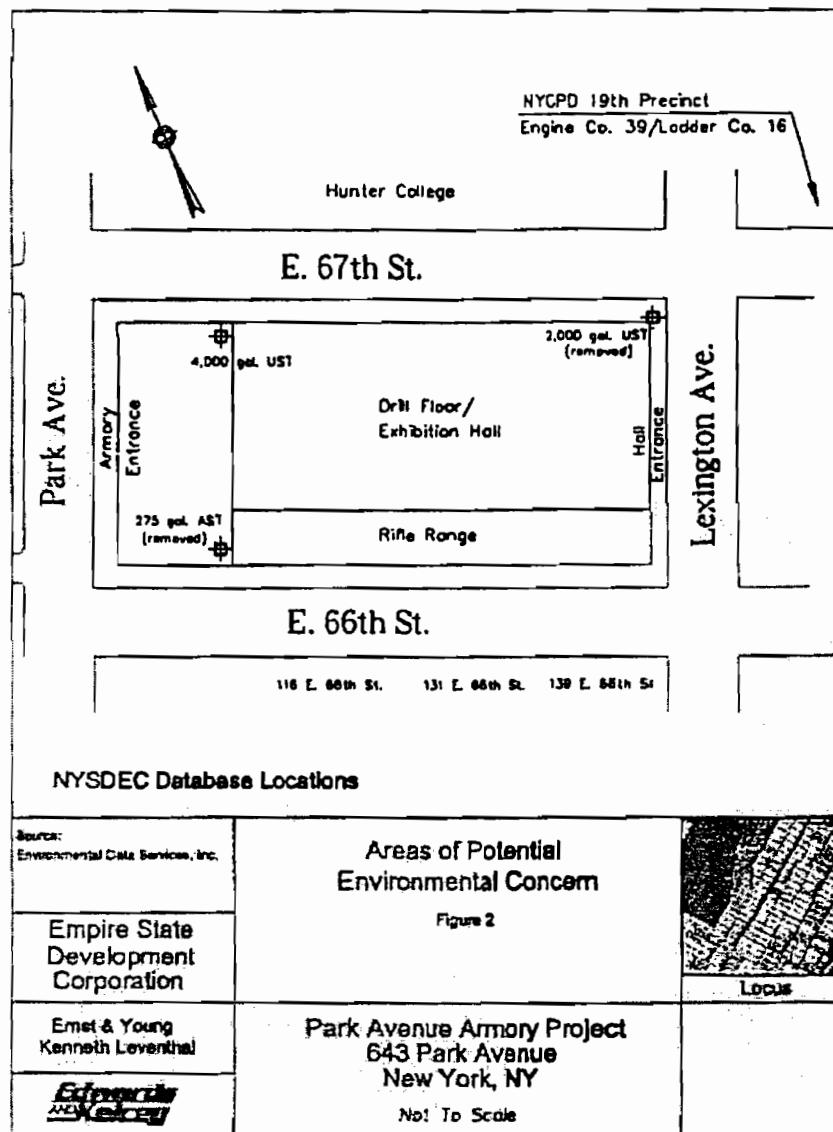
According to the state database, a 2,000-gallon steel/carbon steel UST, installed in 1960 and used to store unleaded gasoline, was closed and removed in April, 1994. According to the Division of Military and Naval Affairs (DMNA), actually two (2) 500-gallon tanks were located on the exterior of the building along East 67th Street near the intersection with Lexington Avenue. Soil samples taken in the tank excavation area indicate that the constituent levels were well under the regulatory limits established by the New York State Department of Environmental Conservation ("NYSDEC").

A 275-gallon AST on saddles, legs, stilts, or cradle, installed in 1975 to store diesel, is currently out of service.

The NYSDEC Spills Information Database identified the project site on the Leaking Underground Storage Tank (LUST) list. A tank overfill on January 6, 1989 resulted in three inches of oil in the elevator shaft. The file for this event was closed in February 13, 1989, following site cleanup. No additional information regarding this event is available from DMNA. A tank test failure was noted on March 27, 1997. According to DMNA, the vent for the 4,000-gallon tank was found not to be tight.

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The NYSDEC PBS Database identified 45 USTs within  $\frac{1}{4}$  mile of the project site. Most USTs are located within apartment buildings in this predominantly residential neighborhood. As indicated in Table 1, of the eight USTs located within 1/8 mile of the project site, five are tanks in apartment buildings (ranging in capacity from 5,000 to 20,000 gallons). Diesel and unleaded gasoline tanks (including both USTs and ASTs) are located at the NYPD 19th Precinct at 153 E/ 67th Street, Engine Co. 39/Ladder Co. 16 at 157 East 67th Street, and Hunter College at 695 Park Avenue. Locations of adjacent tanks are indicated in Figure 2.



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The NYSDEC Spills Information Database lists 46 Leaking Underground Storage Tank (LUSTs) Incident Reports within a  $\frac{1}{2}$  mile of the project site. Most LUSTs were associated with tank tightness testing failures and overspills from oil deliveries. The files have been closed on most of these events. As indicated in Table 1, five LUST sites are located at or within  $\frac{1}{8}$  mile of the Park Avenue armory (14 are located between  $\frac{1}{8}$  and  $\frac{1}{4}$  mile of the site and 27 are located between  $\frac{1}{4}$  and  $\frac{1}{2}$  mile of the site).

*Local Records Review*

A record search from the New York City Fire Department (NYCFD) indicates that no record of underground storage tanks at this location.

*Existing Conditions*

The project site is located in a densely developed urban area dominated by Hunter College to the north and multi-story apartment buildings with ancillary commercial services, medical offices and public facilities including the NYPD's 19th Precinct and Engine Co. 39/Ladder Co. 16 to the east, south and west.

The Armory is located on the block bounded by Park Avenue, Lexington Avenue, East 66th Street and East 67th Streets, with the main entrance to the five-story Headhouse at 643 Park Avenue. There is a secondary entrance to the single-level Drill Hall on Lexington Avenue. The following military purposes and ancillary functions historically have been housed and/or continue to operate:

- Social organization or clubhouse for voluntary members of the Seventh Regiment. Reception areas on the first floor provide meeting rooms. Additional clubrooms and lounges are located throughout the building.
- The fourth floor mess, now leased and operated as a restaurant. The restaurant is closed during summer months.
- Offices and meeting spaces for various military companies. These second floor offices are now operated on a full time basis by the National Guard. Recruitment offices are located on the first floor.
- A homeless shelter, operated by the Lenox Hill Neighborhood House, a city subcontractor, on the third and fifth floors. The fifth floor was previously operated as a gymnasium.
- Rifle firing range, located in the basement. This facility, used exclusively by the Seventh Regiment Rifle Club as a leasee, is no longer operational.
- The 31,000-square foot drill floor, used by the National Guard one weekend each month. Between Labor Day and June, this area is leased as exhibition space for various shows including the art, rare book and antiques shows and other events.



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A site inspection was conducted July 22, 1999 with the Armory superintendent. Maintenance of the third and fifth floors is by the Lenox Hill Neighborhood House and not state personnel. A representative portion of the rooms was inspected. Areas not investigated included the rifle firing range and the adjacent kitchen in the basement and the restaurant and kitchen on the fourth floor. The following information does not constitute a full Phase I environmental site assessment (ASTM Standards on Environmental Site Assessments for Commercial Real Estate, Standard E 1527-94 and E 1528-93).

Major renovations were conducted in the early part of the century to install electricity and to rewire the gas lighting lines and electrify chandeliers. The building is heated via a dual heating system with natural gas supplemented by fuel oil when ambient temperatures reach 13 degrees Fahrenheit or below. The original system was coal-fired. Low pressure steam heat is delivered to radiators via a two pipe network. A 4,000-gallon vaulted fuel oil tank (UST) in the basement is used to power the backup system. A vault provides secondary containment around this UST. No floor drains were observed in the vaulted space. Steam pipes to the exhibition floor are located in a lighted pipe tunnel along the north side of the building. Wall-mounted natural gas space heaters are located throughout the drill floor / exhibition area.

Although there is no central air conditioning, several of the offices and function rooms have individual window air conditioning units. The fourth floor restaurant is air conditioned. Due to Landmark status, fire sprinklers have only been installed in the basement. There are no backflow prevention devices on the fire sprinkler system. All domestic water service to the building is pumped from the basement via two pumps to a tank on the roof. A 3,000-pound capacity electric elevator services all floors. A sidewalk elevator on East 67th Street is no longer operational. An emergency generator previously located in the basement kitchen, was removed one year ago.

Because of the Landmark status of the building, only limited fluorescent lighting with potential PCB-containing ballasts (pre-1978) have been installed. Emergency lighting is provided in the Homeless Shelter on the third and fifth floors. It is presumed that these units are battery operated.

Lead dust testing was conducted in the rifle range and the adjacent kitchen entrance in 1997. Samples exceeded EPA and HUD criteria for lead-in-dust for floors. DMNA has closed both the kitchen and rifle range to public access.

Asbestos has historically been used as roofing material, as an insulation material on steam piping, as floor tiling, and as fire proofing. According to information obtained from the DMNA, asbestos abatement has been conducted in the boiler room, kitchen, and pipe tunnel along the East 66th Street side. All asbestos has not been removed from the basement area. Definitive testing has not been accomplished for the entire basement.

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*Areas of Concern*

While not specifically indicating a contamination problem, based on what is known about the site, the following observations were made:

Lead contamination in the rifle firing range has been documented. The range and adjacent basement kitchen have been closed to prevent exposure to this hazardous material.

No building-wide asbestos study or abatement plan has been conducted. Although asbestos abatement projects have been conducted in the basement and within the pipe tunnel, it is likely that asbestos-containing pipe insulation may be found on upper levels of the building and may continue to be found in the basement. Suspect asbestos-containing building material (ACBM) may be found in floor tiles and ceiling panels in the locker areas on the fourth floor, within second floor additions constructed out over the drill floor area, and above the vaulted underground storage tank in the basement.

Due to the age of the building, lead-based paints may be assumed to be located throughout. Leaded glass panes may be integral portions of stained glass decorative art.

Vehicles are routinely driven throughout the drill floor/exhibition hall. Although no vehicle maintenance is conducted at the present time, historical vehicle maintenance activities on or adjacent to the drill floor could have had the potential to adversely affect subsurface soils if the flooring were not competent. To the best of DMNA's knowledge, vehicle maintenance has never been conducted on the drill hall floor and they are not aware of any hazardous materials spills in this area. There are no floor drains on the drill floor.

Two 500-gallon gasoline USTs (mistakenly listed by NYSDEC as one 2,000-gallon tank), located in the yard at the corner of East 67th Street and Lexington Avenue, were removed in 1994. A 275-gallon AST located in the basement kitchen is scheduled for removal in August, 1999. Both areas should be evaluated to determine if past use has adversely affected site conditions. The 4,000-gallon UST failed a tank tightness test in March, 1997. Although DMNA documentation indicates that the vent pipe was found to not be tight and that there were recommendations that the vent be replaced and retested, there is no conclusive evidence in the files that such work was conducted.

A floor drain observed in the paint storage area in the basement has been blocked with duct tape. It is not clear where this line discharges.

Routine pesticide application is conducted along the exterior of the building.

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## APPENDIX 5B

## Building Systems Assessment

*The following section contains descriptions of the building's HVAC, electrical, plumbing, and fire protection systems.*

*1. Mechanical and HVAC Systems*

## HEATING SYSTEM DESCRIPTION

Two-pipe low pressure steam consisting of two (2) cast iron sectional boilers fired by dual fuel combination burners for #2 grade fuel oil and natural gas. The gas service which is the primary fuel is interruptible and therefore the burners are fired with #2 fuel oil whenever the outdoor air temperature gets below a temperature determined by the utility company. (Usually 20-25 degrees F.)

Steam distribution from the boilers is through an 8" low pressure steam main in the boiler room that splits into two (2) 6" and one (1) 1 1/2" sub mains to the building radiation. Low pressure steam condensate return from the radiation is taken back to a duplex vacuum pump set in a pit at the basement level. The condensate is collected in the storage receiver of the duplex vacuum pump set where it is then pumped over to the receiver of the boiler feed pumps and receiver set which is located in a room adjacent to the boiler room in the basement. The boiler feed pump set contains two (2) pumps one for each boiler that returns the condensate back to its respective boiler on a call from the boiler low water level pump control.

A four (4,000) thousand gallon fuel oil storage tank is located in a storage room adjacent to the boiler room.

The low pressure steam mains and condensate return lines are located at the ceiling of the basement where they are exposed and within pipe tunnels in portions of the building where there is no basement beneath the First Floor. Branch pipe risers extend vertically from the basement up to the radiation located on the upper floors of the building.

Radiation in the building consists of cast-iron sectional wall mounted type, floor mounted cast-iron column sectional, floor mounted vertical pipe mounted into cast iron headers, and horizontal propeller unit heaters which are located mainly in the drill hall. There is a door blower-heater for the garage door of the Drill Hall.

The boilers, vacuum pump set and boiler feed pump set appear to be in fair to good condition. Maintenance personnel stated that the low pressure steam supply mains and condensate return piping have many leaks while the steam traps on the radiation and at steam main drips are in good condition.

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Because it was the summer season when the building was surveyed by JCMa the heating system was not active and therefore none of the statements made about the piping system could be confirmed.

#### HEATING SYSTEM EQUIPMENT

Boilers – Weil – McLain cast iron sectional, Model H 1994 S.F.

16920 Square Feet Steam

4542 8 MBH Water

Vacuum Pump - No nameplate data available. Building drawings indicate that the design for this vacuum pump was a capacity of 100,000 EDR at 20 psig with 7 1/2 HP motors.

Boiler Feed Pump Set – No nameplate data available. Building drawings indicate boiler feed pump capacity to be 28 GPM at 20 psig, 1 HP motor. Fuel oil pump was designed for 2.9 GPM at 100 psig, 1/3 HP.

#### AIR CONDITIONING

There is no central air conditioning system within the building. The minimal air conditioning that is installed consists of window air conditioning units located throughout the building in various offices and five (5) split system units serving the Fourth Floor restaurant dining area, consisting of evaporator blowers indoors and condensing units located on the roof. The split systems are manufactured by Sanyo, Model SAP483C condensing unit with Model SAP483T indoor unit (evaporator section). Cooling capacity for each of these units is 46,500 BTU. Electrical characteristics 208v / 3 / 60, 24.6 amps total.

There is an abandoned condensing unit located in the Drill Hall that had served the Building Superintendent's office. The unit is in need of repair.

#### VENTILATION

The building has minimal mechanical ventilation. Windows appear to be the main source of ventilation within the building. The public toilets contain grilles that connect to gravity exhaust shafts that terminate at the roof. According to building drawings, modifications were made to the men's and women's toilets and janitors closet that added an exhaust fan with a capacity of 670 cfm that discharged into an existing gravity vent shaft.

The restaurant (located on the Fourth Floor) has three exhaust hoods one of which is for the dishwasher exhaust that connect to a common duct. The duct runs out the wall of the kitchen to a centrifugal exhaust blower located on the roof adjacent to the kitchen. This appears to be changed from building

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drawings done in 1976 that indicated an exhaust system from the kitchen and dining room. The exhaust air was ducted up to a storage room above where an existing exhaust fan capacity was increased by changing the fan speed from 283 rpm to 450 rpm and the motor was increased from 3 HP to 5 HP.

The building drawings also indicate the addition of twelve (12) wall mounted propeller exhaust fans for the rooms that were labeled as locker rooms on the Fourth Floor. Capacity of these fans are 594 cfm at 1550 rpm with a 1/50 hp motor.

The Drill Hall has two (2) gravity vents located on the peak roof of the Drill Hall as well as two (2) propeller exhaust fans located at the high point of each short end wall.

The Drill Hall has eight (8) propeller type anti-stratification fans mounted below the roof trusses.

#### CONTROLS

There is no central control system for the building other than ten (10) zone sensors (two per floor) that monitor the temperature of each floor. These sensors control the burner operation of the boilers. When a majority of the sensors read temperatures above their settings the burners are shut down. The control system is monitored by Optimum Applied Systems Inc., 145 Palisade Avenue, Dobbs Ferry, NY which can remotely reset the temperature settings. The local panel provides settings and temperature readings for each zone.

The building heating drawings dated 1966 indicated two (2) zone control valves for the heating system. The thermostats for these valves were to be located in the Adjutant's office and the switchboard room. According to the building maintenance personnel the control described above is the only functioning control.

The five (5) split system air conditioning units in the restaurant each have an electronic wall mounted thermostat.

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*2. Electrical Systems*

MAIN ELECTRICAL SERVICE

Electric power enters the building at 120/208 volts, 3 phase, 4 wire from Consolidated Edison's facilities on Park Avenue.

There are two metered services.

The main service enters switchboard section containing a 2000 amp main circuit breaker and current transformers for Con Ed's metering. The meter for this service is located on the wall to the right of this switchboard section.

A second metered service is tapped ahead of the main current transformers and supplies "Show Lighting" in the Drill Hall through a separate 400 amp CT cabinet and two 200 amp disconnect switches.

ELECTRICAL DISTRIBUTION

The 2000 amp main circuit breaker supplies a 120/208 volts, 3 phase, 4 wire, 2000 amp main switchboard through a 2000 amp bus duct run low along the wall.

The main switchboard was manufactured by the Pelham Electric Manufacturing Co. but no longer has a nameplate identifying the electrical characteristics.

The switchboard contains 28 individually mounted circuit breakers supplying various panelboards located throughout the building.

One of these has been replaced with an enclosed circuit breaker mounted on the front of the switchboard.

One of the metal panels on the rear of the switchboard had been removed exposing the live bus bars to view, and accidental contact.

Two permanently installed "temporary" feeders exit the switchboard through this opening where they had been tapped to bypass defective or inadequate circuit breakers and go on to supply the Drill Hall through two disconnects on the other side of the wall. These feeders are not run in conduit but are strung through porcelain insulators between the switchboard and the disconnects and there does not appear to be any equipment grounding conductor. From there they go on to the Drill Hall in flexible nonmetallic conduit.

Several of the bolts securing the bus bars in the switchboard have rusted.

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The building underwent an electrical rewiring program in 1963. Several new panelboards and feeders were installed. Some new panelboards were added to existing feeders. Most of the original branch circuit wiring was replaced.

The main switchboard was also modified at this time. The result is a mix of the old and the not so old.

The original panelboards were fabricated using the original Westinghouse industrial style of circuit breaker. These are no longer readily available for replacement and must be specially ordered at a premium price if available at all.

Almost all of these original panelboards have long since lost their initial dead front construction. None of the doors in the panelboard trims that we encountered were locked. Most of the panelboard fronts are missing or misplaced leaving the energized bus bars and wiring terminations exposed to view and accidental contact. The same observations were made for some of the newer panelboards. We noticed one of the newer panelboards mounted horizontally to fit the available space. This is not the position for which they were intended or tested as a unit.

The original feeder and branch circuit wiring is copper conductor with RHW single or double braid covering. The newer wiring is copper conductor with THW insulation.

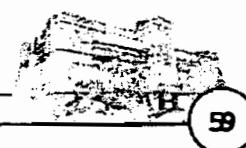
#### LIGHTING SYSTEMS

Lighting is generally incandescent. The original ornate chandeliers and wall brackets remain. The remainder of the incandescent fixtures were installed in 1963. The capacity of the branch circuits prevents the installation of anything larger than 40 or 50 watt incandescent lamps in most of the fixtures. While the resulting illumination levels were no doubt acceptable at the time, they are woefully inadequate for today's needs.

Fluorescent lighting fixtures were installed in some areas requiring higher levels of illumination such as classrooms and offices. Some were installed in 1963. Others were already existing when the 1963 project was undertaken.

Metal halide lighting fixtures with remote ballasts were installed in the Drill Hall in 1975.

The 120 volt convenience outlets that we observed were all 2 pole, 3 wire grounding type.



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**EMERGENCY POWER SYSTEMS**

A diesel engine generator set and automatic transfer switch were installed in 1963 but the generator has since been removed and the transfer switch serves no purpose.

Emergency lighting is now provided by individual battery powered unit equipment conspicuously located throughout the building.

**FIRE ALARM & DETECTION SYSTEMS**

A combination manual and automatic fire alarm system consisting of manual pull stations, automatic smoke detectors, horns and strobes was installed in 1989. The system is local only and the alarm is not transmitted off the premises.

There are a few local fire alarm systems on the upper floors of the building protecting areas that are not covered by the main building fire alarm system.

***3. Plumbing Systems***

**DOMESTIC WATER SERVICE**

Two (2) water services presently supply the structure. A 4" metered service enters the structure from 67th Street.

Services are interconnected at the basement ceiling, branch laterals are provided to supply basement plumbing fixtures.

Two (2) 7½ H.P. booster pumps located in the engineer's office, north elevation of basement, provide water supply to the building house tank.

The booster pumps are activated via a float switch located in the house tank. Booster pumps do not alternate automatically, facility personnel manually shut one pump off. Pump activation occurs every two days.

Piping material for domestic water distribution is copper, Type "L" with wrought tube fittings and soldered joints. All exposed piping is provided with fiberglass insulation.

**DOMESTIC HOT WATER DISTRIBUTION**

Domestic hot water is currently supplied by three (3) gas fired hot water heaters.

Each heater manufactured by A.O. Smith, Model No. BTC-305, 75 gallon storage, 305,000 BTU input, is connected by a manifold piping system.

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The heaters are located in the basement boiler room, and were installed this year.

The units provide hot water to all plumbing fixtures throughout the structure with the exception of the kitchen.

Hot water distribution piping incorporates a hot water return system.

An additional gas fired hot water heater located on the 4th floor in the kitchen area, and manufactured by A.O. Smith, Model No. BT-199, 84 gallon storage, 199,000 BTU input, supplies hot water to all kitchen equipment.

**BUILDING HOUSE TANK**

A 6500 gallon steel house tank is located in the tank room above the fifth floor mezzanine.

The lower portion of the tank (3,600 gallons) is utilized for fire protection.

A 6" fire main and a 3" domestic main exit the house tank.

A 2" cold water line from the booster pumps supplies water to the tank.

**PLUMBING FIXTURES**

Toilet facilities throughout the structure are comprised of floor or wall mounted water closets, wall hung urinals, and/or wall or counter top lavatories.

All plumbing fixtures are vitreous china. Plumbing fixtures are all out-dated.

Single lever chrome-plated flush valves are installed at all water closets and urinals.

Chrome-plated center-set faucets are provided at all lavatories.

Water supplies to lavatories are flexible chrome-plated tubing with associated angle valves and wheel handles.

Five (5) shower stalls are located in the basement level, each provided with single lever shower controller assemblies.

ADA plumbing fixtures are provided throughout the structure, with the exception of the basement shower stalls.

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**NATURAL GAS PIPING**

The gas service main enters the building from 67th Street.

Three (3) gas meters are presently located in the north side of the basement level.

The gas service supplies two (2) boilers, three (3) domestic hot water heaters in the basement, one (1) domestic hot water heater on the Fourth Floor (Kitchen) and gas fired range, ovens and fryers in the kitchen area.

All gas piping is steel with screwed fittings.

**STORM SEWERAGE**

A majority of the roof drainage for the structure is accomplished by means of a system of exterior gutters and leaders.

Roof drainage for the drill hall incorporates a system of gutters and leaders discharging into a battery of five (5) roof drains located on the lower level roof area above the drill hall vaults. The roof drains are connected to interior storm leaders exiting through the lower level tunnel wall below the city sidewalk.

***4. Fire Protection Systems***

Two (2) fire hose racks including 1½" valves with 1" fire hose are located in each corridor on all floor levels.

A 2½" copper tube fire riser supplies each hose rack.

The lower level of the house tank is utilized for the fire standpipe system. A 6" fire main connection at the tank supplies the 2½" fire risers.

Two (2) fire department connections located at 66th and 67th Streets are interconnected to the fire main at the basement ceiling.

A 4" fire water service enters the building from 66th Street. This service is provided with a sprinkler alarm check valve. This system is utilized for a limited area sprinkler system in the basement level.



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## APPENDIX 5C

## Architectural Assessment

*1. Interior Assessment*

The Armory is made up of two wings, the Headhouse and the Drill Hall. The Headhouse faces Park Avenue and is a 5 story structure plus a cellar level. The footprint is approximately 200 feet by 100 feet, occupying the western edge of the site. A single passenger elevator serves all floors. A gymnasium was added on the fifth floor and is set back from the block below. The Drill Hall occupies the other three-quarters of the site toward the east.

## HEADHOUSE:

*Cellar Floor*

The cellar floor space includes the boiler room and mechanical utilities as well as storage rooms, toilet and locker rooms for the Women's Shelter, a kitchen, and rooms reserved for the private use of the Knickerbocker Greys and other armory constituents. Extensive piping for mechanical systems is installed below the ceilings in the main corridor.

Windows on the west side are above grade at Park Avenue. An inoperative rifle range exists along the 66th Street perimeter, below the Drill Hall, and a pipe chase is at the northern perimeter. The area below the drill hall is otherwise unexcavated.

The primary public access is from the two wings of the main center stairwell; there is also an entrance from stairs leading down from 67th Street, used as the entrance to the Lenox Hill Women's Shelter. Another exit exists on the south side, although it is not currently used.

Each of the floors is discussed below:

*First Floor*

The first floor comprises the formal public spaces with decorative interiors.

Exiting is through the main entrance onto Park Avenue or through the Drill Hall.

A number of rooms on this floor have sustained water damage. These include the Commander's Reception Room (southeast corner), and the Divver Room on the west side. The Board of Officers/Clark Room has sustained extensive water damage on both the south and west walls. Heavy efflorescence, flaking paint, and spalling plaster are visible on the walls, as well as water staining and cracking on the ceiling. Scaffolding has been erected covering the entire ceiling in this room.

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*Second Floor*

The second floor is occupied by the Company Rooms. The entire floor has City Landmarks designation with the exception of the mailroom, toilet rooms, and one converted office space. The main corridor opens directly onto the central stairwell which connects down to the first floor and upward to the third floor. The northeast company room has access to the Drill Hall mezzanine below. Rooms on the east side have windows looking into the Drill Hall. The landing between the second and third floors provides access to a balcony overlooking the Drill Hall.

The ceiling on the north side of the main corridor is scaffolded after cracking and sagging was noted, particularly in the area of the large chandelier.

The Company A Room 211 has sustained water damage in the southeast corner.

Miscellaneous rooms on the west side show water damage, although not extensively.

Exiting from this floor is via the main central stairwell. The north and south stairwells start at this floor, and while leading upward also provide access (through a window) to exterior fire escapes on either end.

*Second Floor Mezzanine*

The rooms on the second floor mezzanine level are accessed from stairwells integrated into the decorative finishes of the company rooms. The spaces, with low ceilings (relative to the rest of the floor), are used as offices or storage.

*Third Floor*

The third floor is primarily occupied by the Women's Shelter, although some rooms are used by military constituents. The main corridor functions as a lounge for the shelter. Rooms are used as sleeping areas, administrative offices, and a clinic. Rooms on the east side look into the Drill Hall.

The main central staircase terminates at this level. The ceiling finish is peeling badly in this hallway. A partition has been erected separating the stairwell from the main north-south corridor and adjacent spaces, with an exit door provided for access to the stairwell. Additional exiting is provided at the north and south ends of the Headhouse, and partitions have been erected at both ends to separate the stairs from the main corridor, although the end rooms are accessed from the stairwell side of the partition.

Some water damage was observed on the west side walls.

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*Fourth Floor*

The east side of the fourth floor is occupied by the restaurant's main dining room and kitchen, a smaller private dining room at the north end and a storage room at the south end. The north and south end of the west side include a private dining room and a storage room, while the middle spaces comprise two-level locker rooms. These are essentially unused, except in a minimal fashion as storage and coat check space for the restaurant.

Primary exiting from this floor is at the north and south ends of the main corridor. Additional egress from this floor is available through doors on the east wall, which access rooftop fire escape stairs above the Drill Hall roof, leading to both 66th and 67th Streets. Partitions have been placed at the north and south ends in order to segregate the main corridor, which serves as a prefunction lounge to the restaurant, from the exit stairwells. The end rooms, however, are on the stair side of the partitions.

*Fifth Floor*

The fifth floor was originally built as a gymnasium and is primarily a large clear-span space, with a balcony inserted on the north end. It is now entirely used by the Women's Shelter for sleeping, toilets, and offices. As this floor is a later addition to the building, the stairwells were planned as separated from the occupied space. Exiting is also provided on the east side, where doors from the gym access fire escape stairs which lead to 66th and 67th Streets. Additional fire escapes are also provided at the intermediate stair landings on both the north and south sides.

As this floor is set back from the massing of the Headhouse below on the Park Avenue side, access to the western roof area and tower roof is provided by doors at each end.

**DRILL HALL**

*First Floor*

The large vaulted space of the Drill Hall is over three stories in height against the adjacent Headhouse structure. The Drill Hall is accessed by vehicles and pedestrians from Lexington Avenue and also formally from the main entrance hall on the Park Avenue side. The east (Lexington Avenue) exits are at the north and south corners and in the center. The west exit is through the Headhouse or via the balcony fire escapes.

The enclosures below the balconies, added as storage rooms, support spaces and public toilets, are not part of the Landmarks designation.



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*First Floor Mezzanine*

These spaces are accessed from the main stairwell landing and are used for offices/locker rooms for the military.

The mezzanine level also includes the Drill Hall balcony level, which is also accessible from the main stair landing. The Drill Hall balconies on the north and south sides have been platformed over the stepped structure to provide storage and locker space for military use.

Exits from the balcony are through the stairwells at each corner, as well as via a single door on each street side, located in the middle of the wall, leading to fire escapes down to 66th or 67th Street.

*2. Architectural Assessment of Exterior*

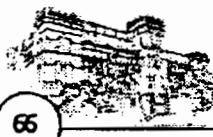
Please note that this assessment is not meant as a definitive survey of damage sustained in all areas.

The exterior wall is brick masonry, with stone at window heads, sills, and decorative courses. It is a masonry bearing wall structure and typically appears to be approximately 24" thick. Many mortar joints appear to be eroded or poorly repointed, and brick has been damaged in prior repair work.

Roofs on the building are relatively new and appear to be in fair to good condition, although trees are growing at the parapets on the 67th Street side. The fourth floor roof on the Park Avenue side is a sloped mansard, with a standing seam metal roof, rising behind the crenellated parapet.

Exterior fire escapes are equipped with a counterweight which allows the ladder to descend to street level in the event of an emergency. Although archaic, these appear to be in operable condition, and are included in the records of the NYC Department of Buildings and the exterior landmark designation.

Water penetration in many areas of the building has resulted in extensive interior damage. There are a number of different conditions which have been identified, in a series of reports collected by the State Office of General Services, as contributing to the failure of the exterior envelope. These repeatedly include inadequate or non-functioning gutters, downspouts and roof drainage systems. This causes water to empty over the parapets and embrasures through scuppers, and run down across the face of the building. Eroded mortar joints at window heads are a likely source of penetration. The buildup and flow of water against deteriorated parapet masonry and flashings has similarly allowed water penetration to interior cavities and the finished spaces beyond. Other factors include leaking of internal leaders, which, according to the records, was addressed in an emergency project in 1998.



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THE SEVENTH REGIMENT ARMORY ON PARK AVENUE

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There are a number of remedial projects underway or anticipated in the near future in order to address the facade deterioration.

The State Office of General Services has scaffolding in place on all the towers of the armory, including the side streets. They have undertaken an emergency project of brick reconstruction at the towers, particularly concentrating on the corbelling, on the Lexington Avenue side of the building. The recovery rate for re-use of brick has not been good and the brick is being replaced with new units, which, by virtue of being new, do not match the weathered old ones. The State expects that emergency facade work on the Park Avenue side will begin in the near future.

A severe crack and bulging masonry exists at the southeast corner of the Headhouse. The area of greatest damage is at the third floor level. Steel plates anchored into the masonry have been installed in an effort to strap the wall together. Damage from water is visible on the interior at all floors in this area. Scaffolding has been erected on the exterior but there are no plans for further work by the State at this time.

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THE SEVENTH REGIMENT ARMORY ON PARK AVENUE

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**APPENDIX 5D**

Architectural Plans

(See Attachment)

THE SEVENTH REGIMENT ARMORY ON PARK AVENUE

**APPENDIX 5E**

**Historic Preservation Assessment**

***Summary of Existing Conditions***

The following section is a descriptive overview of the Armory's facades and interior spaces. It is neither an exhaustive catalog of significant features, nor a detailed survey of conditions which may require repair, restoration, or upgrading. Rather, it is an attempt to convey the building's general character in a brief and accessible format.

The following description makes only passing reference to the building's assemblage of furnishings and artifacts. Questions regarding the ownership of many of these materials remain unresolved.

Interior water damage has been identified in several rooms on the first, second and third floors, including the Clark Memorial Room. Unstable plaster has also been noted in a number of locations (Clark Room, Mary Diver Room, Colonel's Reception, Field & Staff Room, the second floor hall, and rooms 205 and 207). A full survey has yet to be completed, and these conditions may exist elsewhere as well. For further detailed information, please reference this the 1997 report on ceiling conditions to NYS DMNA. This report is included in an additional information package available upon request.

This section is divided into the following sub-sections:

- General chronology of original construction and major alterations
- Exterior description
- Interior description:
  - Headhouse, by floor (basement through fifth floor)
  - Drill Hall



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THE SEVENTH REGIMENT ARMORY ON PARK AVENUE

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*General chronology of original construction and major alterations:*

1877-80 Original building construction.

1879-81 Build-out and furnishing of interiors.

1896-97 Entire building electrified; some of the elaborate original gas lighting fixtures were retained and wired for bulbs; others were replaced.

1902 New exposed-pipe heating system installed throughout building, replacing original system.

1909-11 Major renovation and expansion of Headhouse. This work included:
 

- Third story raised to full height
- Fourth story added
- Upper section of central tower removed, and new crenellation added
- Mezzanine levels inserted on eastern side of first and second floors, with additional partitioning in the newly-created spaces
- New stairways inserted at both ends of main corridor, connecting floors 2 through 4
- Extensive work on heating system

1912-13 Major alterations to Drill Room, including construction of a new, enlarged spectators' gallery, along with changes to window openings, and a new paint scheme.

1928-29 Fifth-floor gymnasium added, and north and south stairways extended for access; fourth-floor spaces converted into new dining and social spaces (including the Daniel Appleton Memorial Mess Hall, decorated in 1930-31).

1930-40s Renovation of third floor, numerous other alterations and "restoration" projects.

1950s-90s On-going series of ad-hoc minor alterations. These changes are poorly documented, and have generally not been historically significant. Therefore, they have not been specifically addressed in this document

1997-98 Temporary measures (still in place) in response to discovery of unstable ceiling plaster on first and second floors.

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**THE SEVENTH REGIMENT ARMORY ON PARK AVENUE**

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***Exterior Description***

The Armory building occupies the entire city block bounded by Park Avenue, Lexington Avenue, 66th and 67th Streets. It consists of two separate elements unified by closely-related facades of brick masonry: The five-story Headhouse fronts on Park Avenue, while the attached Drill Hall faces Lexington, occupying three quarters of the site. The two avenue facades are framed by pairs of corner towers, and a third pair of towers marks the eastern wall of the Headhouse where it abuts the Drill Hall. Another single tower marks the building's principle entrance at the center of the Park Avenue facade. (The upper section of this tower was removed in 1909-11.)

- **Brick Masonry**

- The original masonry exterior walls are of pressed red brick, with narrow joints and tinted mortar. Vertical surfaces are laid up in running bond, and are embellished with brick corbelling and crenellated battlements.
- Similar materials were used for subsequent alterations to upper floors of the Headhouse and to the original Drill Hall window openings.
- The exterior walls of the fifth-floor gymnasium, added to the Headhouse in 1929, are faced with common brick. The gym's north and south endwalls are treated as stepped gables.

- **Stone Masonry**

- The exterior brickwork of the entire structure is trimmed in grey granite.
- The granite elements include: battered and rusticated base; retaining walls; string courses; sills, enframements, lintels, voussoirs, and brackets at window and door openings; double stoop at the main entry; arched corbelling; loophole blocks; and parapets and copings

- **Windows**

- On the Headhouse, windows are double-hung wood sash, some with transoms. Wrought-iron grilles screen window openings on the lower floors.
- The Drill Hall is illuminated by two rows of clerestories in the roof, and a large, segmentally-arched window above the Lexington Avenue vehicular entrance.

- **Doors**

- The Park Avenue entrance pavilion incorporates massive paired entry doors fronted by elaborate wrought iron gates.
- The Lexington Avenue vehicular entrance is equipped with a roll-down steel gate (installed in 1955).

THE SEVENTH REGIMENT ARMORY, ON PARK AVENUE

• Roofs/Parapets

- Pitched roofs enclose both the Drill Hall and the Headhouse's fifth-floor gymnasium
- Areas of flat roof cap all seven towers, as well as the remainder of the Headhouse around the gym
- A mansard encloses the western (Park Avenue) side of the fourth floor
- Most visible roofing material appears to be recent, with sheet metal, membrane roofing, and built-up roofing used in various areas
- Drill Hall clerestories and related vertical surfaces clad in sheet copper
- Copper flashing, gutters and leaders

• Metalwork

- Iron railings at main entrance, around areaways, and along perimeter plantings
- Wrought-iron and steel fire escapes on the north and south facades
- Wrought-iron gate and lighting fixtures at main entry

## THE SEVENTH REGIMENT ARMORY ON PARK AVENUE

*Interior Description*

## HEADHOUSE

From the basement to the fourth floor, the interior spaces of the Headhouse are arranged along a double-loaded north-south corridor. The main stairwell is located at the center of the building along the east side, and reaches from the basement to the third floor. Auxiliary stairways, completed in 1911, are located at the north and south ends of the main corridor, and connect floors two through five. An elevator off the north corridor serves all six floors.

The first floor houses the building's principal presentational spaces, used by the regiment for ceremonial and public functions; it also communicates directly with the Drill Hall to the east. The second floor is primarily devoted to the club rooms originally used by the regiment's individual companies. The upper floors house additional office and administrative space, as well as dining and social facilities on the fourth floor and the fifth-floor gymnasium. The basement contains service and utility spaces.

*Cellar*

The basement level of the Armory Headhouse contains equipment for the building's mechanical systems, as well as locker rooms, kitchen space, and storage areas, and other service functions. Shooting ranges and service spaces occupy areas beneath the north and south edges of the drill hall.

The following descriptions outline the general nature of interior treatments and fixtures.

- Floors
  - Generally concrete
- Walls
  - Generally utilitarian brick
- Ceilings
  - Generally pressed metal
  - Exposed utility lines and conduits
- Doors
  - Single- and double-leaf doors, some in paneled wood and some in metal, with matching enframements
  - Many with bronze decorative hardware; some with glazed panels.
  - Many doorways pierce brick masonry bearing walls with segmentally arched openings
  - Additional metal-clad doors of later date

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THE SEVENTH REGIMENT ARMORY ON PARK AVENUE

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- Windows
  - Wood-framed double-hung sash, some with iron exterior shutters
- Other woodwork
  - Paneling and wainscoting (largely beaded-board)
  - Built-in storage fixtures, including cabinets (some with glazed doors), lockers, display cabinets
- Lighting fixtures
  - Recent brass ceiling fixtures
- Plumbing and heating fixtures
  - Bathroom fixtures are typically non-original and non-historic
  - Cast-iron steam radiators
- Other fixtures, furnishings, and artifacts
  - Stairs and railings, in metal and in wood
  - Telephone booths
  - Balance scale; assorted military equipment and memorabilia; other miscellaneous objects

*First Floor*

The first floor of the Armory Headhouse contains the facility's principal public spaces, including some of its most singular and elaborate rooms. The grandly-scaled circulation areas include the Entrance Hall, Main Corridor, and Stair Hall. (The Stair Hall contains the monumental staircase itself, and also serves as the vestibule to the Drill Hall located immediately to the east of the Headhouse). On the west side of the main corridor, the four largest "regimental rooms" face Park Avenue: the Veterans' Room, the Library (converted into the Regimental Museum in 1911), the Reception Room, and the Board of Officers' Room (renamed the Colonel Emmons Clark Memorial Room after its 1932 restoration). The east side of the corridor includes three rooms that were part of the building's original interior layout (the Field & Staff Room, the Equipment Room, and the Colonel's Room) as well as two suites which were carved out of the original North and South Squad Drill Rooms in 1909-11: the Inner & Outer Committee Rooms (north), and the Adjutant's Room and suite (south). [Note: room numbers to be included for cross-reference to floor plans when available.]

The following descriptions outline the general nature of interior treatments and fixtures.

- Floors
  - Hardwood flooring throughout, usually oak, frequently with mahogany and other contrasting species



## THE SEVENTH REGIMENT ARMORY ON PARK AVENUE

- Fields are plain or patterned (herringbone, parquetry, etc.); many rooms also include patterned borders
- Some areas are carpeted

## • Walls

- Flat plaster above paneled wood wainscot (see "Woodwork" below)
- Plaster finished with a wide range of decorative treatments (of those that remain visible, not all are original); techniques include stenciling, applied metal leaf, painted fabric wall coverings, and trompe l'oeil designs

## • Ceilings

- Most ceilings are flat plaster (some with coves, others with molded cornices and friezes). Others are beamed, coffered, or in the case of the Library/Regimental Museum, vaulted ceramic tile. All are treated with a range of plain and decorative finishes; a number no longer preserve their original designs.
- Pressed metal ceilings in the main entry and the first-floor corridor date to 1913.

## • Woodwork

The entire first floor is characterized by generous amounts of rich woodwork, including mouldings, wainscoting, the treatments of door and window openings, and a host of other fixed and moveable elements. Species used included oak, maple, walnut, ash, mahogany, and rosewood.

## • Doors

- Massive, paneled wooden doors in a range of configurations (single leaf, double leaf, and rolling pocket doors) set in paneled surrounds with matching enframements and overdoors
- Many surmounted with transoms (and in one case, oculi), including some with stained glass
- Bronze decorative hardware

## • Windows

- Double-hung wood sash, set in paneled surrounds with matching enframements
- Some with stained-glass window screens, in figurative and abstract designs

## • Other Woodwork

- Extensive paneled wainscoting in almost every room, often with hand-carved decorative elements

THE SEVENTH REGIMENT ARMORY ON PARK AVENUE

- Monumental fireplaces with mantels and overmantels (also frequently incorporating stone, tile, glass, and metalwork elements)
- Diverse types of built-in storage and display fixtures, including cabinets, wardrobes, lockers, bookcases, and show cases
- Decorative hardware and integral lighting fixtures of bronze, wrought iron, and glass
- The woodwork of many rooms also incorporates numerous diverse decorative accents, including carvings, metal-work screens and panels, wooden screens, ceramic tile, as well as many types of glass (stained, leaded, etched, beveled, mirror)
- Lighting fixtures
  - The current lighting system incorporates an array of ornate fixtures dating both from the original gas lighting installation and from the subsequent all-electric system installed in 1911-12, as well as more recent equipment.
  - These represent a full range of fixture types, including chandeliers, wall fixtures, torchères, and smaller fixed and free-standing lamps; they are executed in a variety of materials including wrought iron, brass, bronze, and, in at least one case, polished steel.
- Plumbing and heating fixtures
  - Bathroom fixtures are typically non-original and non-historic
  - Cast-iron steam radiators, some in radiator enclosures of wood and/or metal, some with marble tops
- Other fixtures and furnishings
  - Stairs, balconies, mezzanines, balustrades and railings, in metal and in wood
  - Metalwork gates and screens
- Furniture
  - Display cabinets and other storage equipment
  - Built-in seating (window seats, benches, fireplace inglenooks)
  - Tables, desks, stands
  - Moveable seating
- Art/Artifacts
  - Commemorative plaques, tablets, and displays
  - Weapons, uniforms, flags, and other military equipment and memorabilia
  - Military and hunting trophies

## THE SEVENTH REGIMENT ARMORY ON PARK AVENUE

- Works of art (paintings, sculpture, prints, photographs)
- Clocks, safes, bells, fireplace hardware and tools, and other miscellaneous objects
- Major first-floor alterations, room-by-room:
  - Library converted to "Regimental Museum" in 1911-14
  - Equipment Room (originally Quartermaster's Room), re-fitted in 1895; altered again in 1909-11
  - New spaces carved out of North and South Squad Drill Rooms in 1909-11:
    - South: Adjutant's Room, with other smaller offices en suite
    - North: Inner & Outer Committee Rooms
  - Board of Officers Room "restored" in 1932, and re-dedicated as Colonel Emmons Clark Memorial Room

*Second Floor*

The Headhouse's second floor is primarily devoted to the "Company Rooms," which functioned as club/locker rooms for the Seventh Regiment's constituent company units. Originally ten in number, these units undertook the design and "decoration" of their particular rooms independently, utilizing many of the most highly-regarded designers and craftsmen of the day. Today, there are twelve company rooms instead of the original ten, after the formation of two additional companies in 1909 and the conversion of two rooms for their use in 1909-11. (Company L, originally the Non-commissioned Staff Room; Company M, originally the Adjutant's Room.)

All twelve Company Rooms are elaborately finished, with ornate floor, ceiling and wall treatments. Their extensive woodwork includes lockers for individual company officers, as well as wainscoting, fireplace mantels, and the like. Many of these rooms have been substantially redecorated over time, some more than once.

The following description outlines the general nature of interior treatments and fixtures on the second floor as a whole:

- Floors
  - Hardwood flooring throughout, usually oak
  - Generally parquet; at least one floor is wide-plank oak
  - Some areas are carpeted
- Walls
  - Flat plaster above elaborate woodwork (see "Woodwork" below)
  - Plaster surfaces are finished with a wide range of decorative treatments (of those that remain

## THE SEVENTH REGIMENT ARMORY ON PARK AVENUE

visible, not all are original); finishes include stenciling, applied metal leaf, plaster friezes & reliefs, trompe l'oeil designs, and paper, fabric, and leather wall coverings

- Ceilings

- The ornate Company Room ceilings are enriched with beams, brackets, coffering, panels, strapwork, applied plaster ornament, as well as elaborate moldings and cornices. Other ceilings are flat plaster, some with molded cornices.
- Primary materials are wood, plaster, or both; some also with painted fabric panels. These are treated with a range of plain and decorative finishes; a number no longer preserve their original designs.

- Woodwork

- These second-floor spaces are characterized by generous amounts of rich woodwork, including mouldings, wainscoting, and the treatments of door and window openings, as well as a host of other fixed and moveable elements. Species used included oak, mahogany, ebony, and rosewood.

- Doors

- Massive, paneled wooden doors (single- and double-leaf) set in paneled surrounds with matching enframements and overdoors; French doors open onto Drill Room galleries.
- Many surmounted with transoms, including some with leaded and/or stained glass
- Bronze decorative hardware

- Windows

- Double-hung wood sash, set in paneled surrounds with matching enframements
- Some with stained-glass window screens

- Other woodwork

- Extensive paneled wainscoting in almost every room, often with hand-carved decorative elements
- Monumental fireplaces with mantels and overmantels (incorporating stone, tile, glass, and metalwork elements)
- Various types of built-in cabinetry, including storage lockers, display fixtures, and bookcases
- Decorative hardware and integral lighting fixtures of bronze, wrought iron, and glass
- The woodwork of many rooms also incorporates numerous decorative accents, including carvings, metal-work screens and panels, wooden screens, and ceramic tile, as well as many types of glass (stained, leaded, etched, beveled, mirror)



THE SEVENTH REGIMENT ARMORY ON PARK AVENUE

- Lighting fixtures
  - The current lighting system incorporates an array of ornate fixtures dating both from the original gas lighting and from the building-wide conversion to an electric system in 1911-12. The second-floor Company Rooms in particular preserve a number of the building's original gas fixtures, wired for electrical use.
  - Fixture types include chandeliers, wall fixtures, and smaller fixed and free-standing lamps; they are executed in a variety of materials, including wrought iron, brass, bronze, and polished steel, with metal leaf, stained glass, and other embellishments
- Plumbing and heating fixtures
  - Bathroom fixtures are typically non-original and non-historic
  - Cast-iron steam radiators, some in radiator enclosures of wood and/or metal
- Other fixtures and furnishings
  - Stairs, balconies, mezzanines, balustrades and railings, in metal and in wood
  - Metalwork screens
  - Bar counters
- Furniture
  - Display cabinets, lockers and other storage equipment
  - Built-in seating
  - Tables, desks, stands
  - Moveable seating
- Art/Artifacts
  - Commemorative plaques, tablets, and displays
  - Weapons, uniforms, flags, and other military equipment and memorabilia
  - Military and hunting trophies
  - Works of art (paintings, sculpture, prints, photographs)
  - Clocks, piano(s), and other miscellaneous objects
- Major second-floor alterations:
  - Most of the Company rooms have undergone renovation and redecoration, some more than once. As a result, surviving material may represent more than one period, and older finishes may be preserved beneath more recent ones.
  - Two new Company Rooms were created from existing spaces in 1909-11, to accommodate the formation of two new companies within the Regiment:
    - Company L Room, originally Non-commissioned staff room
    - Company M Room, originally Adjutant's Room

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THE SEVENTH REGIMENT ARMORY ON PARK AVENUE

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- Iron stairways connecting second through fourth floors (ca. 1909-11)

*Third Floor*

The third floor contains spaces used for offices, classrooms, the armory dispensary, and a non-commissioned officers' club. The following descriptions outline the general nature of interior treatments and fixtures on the third floor as a whole:

- Floors
  - Hardwood flooring throughout, usually oak
  - Fields are plain or herringbone
  - Some areas are carpeted
- Walls
  - Flat plaster, generally above paneled wood wainscot (see "Woodwork" below)
  - Painted plaster. At least two rooms show elements of decorative treatments, include stenciling, applied metal leaf, and paper wall coverings
  - Some more recent partitions of gypsum wall board, sheet metal and other lightweight materials
- Ceilings
  - Most ceilings are flat plaster: some are beamed; one has applied plaster strapwork.
- Woodwork
  - The third floor's main rooms and circulation spaces all retain generous amounts woodwork, including mouldings, paneled wainscoting, and treatments of door and window openings. Species used include oak, mahogany, and pine.
- Doors
  - Massive, paneled wooden doors in single- and double-leaf configurations, with matching enframements and overdoors
  - Many surmounted with glazed transoms
  - Bronze decorative hardware
- Windows
  - Double-hung wood sash, set in paneled surrounds with matching enframements
- Other woodwork



## THE SEVENTH REGIMENT ARMORY ON PARK AVENUE

- Paneled wainscoting in main corridor, stairwells, and many rooms
- Diverse types of built-in storage and display fixtures, including cabinets, wardrobes, lockers, bookcases, and show cases
- At least one fireplace (with mantel, overmantel, and ceramic tile surround)
- Lighting fixtures
  - Historic wall and ceiling fixtures in wrought iron, brass, bronze, and glass
  - Recent fluorescent fixtures and track lighting
- Plumbing and heating fixtures
  - Bathroom fixtures are typically non-original and non-historic
  - Cast-iron steam radiators
- Other fixtures and furnishings
  - Stairs, balconies, and mezzanines, with balustrades and railings, in metal and in wood
  - Lockers, shelving, cabinets, and other storage equipment
  - Tables, desks
- Art/Artifacts
  - Commemorative plaques and displays
  - Weapons, uniforms, flags, drums, and other military equipment and memorabilia
  - Military and hunting trophies
  - Works of art (paintings, sculpture, prints, photographs)
  - Clocks, safes, and other miscellaneous objects
- Major third-floor alterations:
  - The third floor was significantly altered in 1909-11, when it was raised to full-story height from its original attic configuration. (The building's fourth floor was also added at that time, along with the north and south stairways connecting floors two through four.)
  - The third floor was remodeled ca. 1930.

*Fourth Floor*

The fourth floor houses the kitchen and dining rooms of the armory restaurant. The main corridor has been fitted out as a lounge, with seating, tables, and bar counter. The remaining space, under the mansard facing Park Avenue, contains two levels of locker rooms.

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The following descriptions outline the general nature of interior treatments and fixtures on the fourth floor as a whole:

- Floors
  - Oak strip (plain, herringbone) and wide-plank pine in dining areas
  - Terrazzo in kitchen, service, and circulation areas

- Walls
  - Flat plaster above paneled wood wainscot (see "Woodwork" below)
  - "Half-timbering" in main corridor and two principal dining rooms; wall paper in other dining rooms.
  - Glazed ceramic tile in kitchen

- Ceilings
  - Most ceilings are flat plaster (some with beam)
  - The main corridor has a low vaulted ceiling with transverse beams
  - Acoustical tile between beams in main dining room
  - Pressed metal ceiling with cove at in at least one other room.

- Woodwork
  - The woodwork in the main spaces of the fourth floor includes: "half-timbering" mouldings, wainscoting, treatments of door and window openings, as well as other fixed and moveable elements. Species used include oak and pine.

- Doors
  - Paneled single- and double-leaf wooden doors, with matching surrounds and enframements; some with multi-pane glazing
  - Bronze decorative hardware

- Windows
  - Double-hung wood sash, set in paneled surrounds with matching enframements

- Other woodwork
  - Paneled wainscoting in many rooms
  - Built-in storage and display fixtures, including kitchen cabinets, storage lockers, and showcases

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- Lighting fixtures
  - Historic wall and ceiling fixtures: some in brass and wrought iron; others incorporating wagon-wheels, military drums, etc.
  - Later fluorescent fixtures
- Plumbing and heating fixtures
  - Bathroom fixtures are typically non-original and non-historic
  - Cast-iron steam radiators
- Other fixtures and furnishings
  - Stairs and railings, in metal and in wood
  - Metalwork gates
  - Kitchen equipment
  - Masonry chimney breasts and fireplaces
  - Bar counter
- Furniture
  - Storage lockers, display cabinets
  - Tables
  - Moveable seating
- Art/Artifacts
  - Commemorative plaques
  - Flags, military and hunting trophies
  - Portraits, prints, photographs
  - Clocks and other miscellaneous objects
- Major fourth-floor alterations:
  - Dining rooms, kitchen, and related spaces created in 1928.

*Fifth Floor*

The fifth floor was added to the Headhouse in 1928, set back from the Park Avenue and side-street facades. The southern two-thirds is occupied by a gymnasium. The northern third is occupied by smaller office and service spaces on the main level, with additional offices on a mezzanine level above.

The following descriptions outline the general nature of interior treatments and fixtures on the fifth floor as a whole:

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- Floors
  - Hardwood flooring throughout, usually oak; maple gym floor
- Walls
  - Flat plaster, with some areas of applied molding for a paneled appearance
- Ceilings
  - Painted metal
  - Exposed steel roof trusses
- Doors
  - Single- and double-leaf wood doors, some with glazing
  - Many recent metal-clad doors
- Windows
  - Glass block with metal-framed operable hoppers
  - Wire-glass interior sash at mezzanine
- Lighting fixtures
  - High-intensity floodlights in gymnasium; fluorescent fixtures elsewhere
- Plumbing and heating fixtures
  - Bathroom fixtures are typically non-original and non-historic
  - Cast-iron steam radiators
- Other fixtures and furnishings
  - Steel and wood stairs, with banisters
  - Steel lockers
- Art/Artifacts
  - Wall clock in main gym; other objects



## THE SEVENTH REGIMENT ARMORY ON PARK AVENUE

## DRILL HALL

Since the time of its completion in 1879, the Drill Hall was one of the largest unobstructed interiors in New York. Measuring roughly 200 feet x 300 feet, it has accommodated numerous social gatherings and sporting events as well as military exercises.

- Floor
  - Original Georgia pine floor
  - Re-laid 1911-13; now painted
- Walls
  - Painted brick masonry
  - Later cinderblock partitions
- Ceiling/roof structure
  - 11 wrought-iron elliptical arch trusses, with subsidiary upper trusses
  - Two levels of clerestory windows
  - Visible wood-plank roof sheathing
- Windows
  - The east facade of the Headhouse overlooks the Drill Hall with multi-pane wood-framed French doors at galleries, and with double-hung wood sash elsewhere.
  - Large arched window opening over Lexington Avenue vehicular entrance, with steel-framed windows with copper-clad mullions.
- Fixtures
  - Seating galleries:
  - Original (1879) bracketed gallery with balustrade on west wall at second-floor mezzanine level
  - Steel gallery with steel fascia and bronze railing on north, east and south walls (1911-13)
  - Large clock mounted on east wall
- Major Drill Hall alterations:
  - Major renovation of entire space in 1911-13, including:
    - New continuous spectators' gallery (with storage space below), new corner stairs, new clerestory windows, new lighting system, new interior paint scheme.
    - Window openings in north and south walls bricked-in, east wall window enlarged, and floor re-laid using original boards.

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THE SEVENTH REGIMENT ARMORY ON PARK AVENUE

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- After 1952, storage and service areas beneath the spectator galleries were modified with cinderblock walls and partitions.
- The Lexington Avenue vehicular doorway was enlarged and a roll-down door installed in 1955.

For historic preservation guidelines and preservation-related aspects of use and design guidelines, please reference legislation and guidelines included in additional information package (available from E&Y upon request).

This package includes the following:

1. Building-specific materials:

New York City Landmarks Preservation Commission designation reports:

- a. exterior (1967)
- b. interior (1994)

National Register of Historic Places nomination/inventory (1975)

National Historic Landmark nomination (1986)

Historic American Buildings Survey information: HABS No. NY-6295

NYS DMNA report: "Park Avenue Armory: Rehabilitation of Decorative Plaster Ceilings" (1997)

2. General regulatory materials:

NYC Landmarks Law

Section 14.09, NY State Historic Preservation Law

Section 106, National Historic Preservation Act

Secretary of the Interior's Standards for the Treatment of Historic Properties.

EXHIBIT N-2

ENVIRONMENTAL CONDITIONS DOCUMENT REVIEW

[Attached behind.]



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December 30, 2003

Kirsten Reoch  
The Seventh Regiment Armory Conservancy  
230 Park Avenue, Suite 618  
New York, New York 10169

Re: Document Review  
Seventh Regiment Armory

Dear Ms. Reoch:

AKRF, Inc. (AKRF) is pleased to present this review of existing documentation relating to environmental conditions at the Seventh Regiment Armory located at 643 Park Avenue in New York, New York. The Armory is located on the block bounded by Park and Lexington Avenues and East 66<sup>th</sup> and 67<sup>th</sup> Streets. AKRF has summarized the reviewed documentation, performed a limited site inspection on June 27, 2003, and provided recommendations addressing each environmental issue. A table including AKRF's notations from the reviewed documents is attached to this letter.

**Hazardous Materials Section from Edwards and Kelcey Initial Screening**

The hazardous materials section of an initial screening report completed by Edwards and Kelcey in 1999 was reviewed by AKRF. This screening included a radius search which identified the following:

- 3 RCRA generators located within  $\frac{1}{2}$ -mile of the Armory, two of which were dry cleaning facilities and one was Hunter College, north-adjacent to the Armory, which generates a variety of hazardous wastes;
- 14 petroleum bulk storage facilities within a  $\frac{1}{2}$ -mile of the Armory, including a listing for the Armory itself. The Armory was listed as having one Leaking Underground Storage Tank (LUST) overfill report (cleanup ceased February 13, 1989) and one tank test failure on record dating from March 27, 1997.
- Several other PBS facilities within the  $\frac{1}{2}$ -mile radius were also listed for Leaking Underground Storage Tank and tank overfill reports.
- The NYSDEC Spills Information Database listed 46 Leaking Underground Storage Tank incidents within a  $\frac{1}{2}$ -mile radius of the site, the majority of which were closed.

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Surrounding land use observed by AKRF in June 2003 included a dry cleaning facility opposite the Armory on East 66<sup>th</sup> Street.

The hazardous materials section indicated that maintenance activities may have been conducted on or adjacent to the drill floor. Scott Swenson, the building superintendent, indicated that a concrete slab is present below the drill hall wooden floor. Edwards and Kelcey noted floor drains in chemical storage areas and a duct-taped floor drain in the paint storage area in the basement. During a limited site inspection by AKRF in June 2003, roofing tar was noted leaking towards a patched floor drain in a basement storage room. Other potential environmental concerns noted in the hazardous materials section included regular application of pesticides along the exterior of the building.

#### Aboveground Storage Tanks (ASTs)

The most current Petroleum Bulk Storage (PBS) Registration Certificate provided to AKRF, dated February 5, 2002, listed the Armory as PBS ID #2-392049 and described one 4,000-gallon steel/carbon-steel tank (listed as tank # 002) at the property. An AST-INFO printout dated March 27, 1995, indicated that the on-site 4,000-gallon tank is an aboveground tank and contains fuel oil for heating. The tank was described in the AST-INFO printout as vaulted but having no internal or external protection, secondary containment, leak detection, or spill or overfill protection. No test dates were listed for the tank. The printout indicated that the tank was used for heating and could not be removed due to a dual fuel system required by Con Edison.

A memo dated August 23, 1999 from Daniel Travers, Director of Facilities Management and Engineering, indicated that this tank and associated piping had been tested and found to be "tight". The memo indicated, however, that the vent pipe was found not to be "tight". Accompanying paperwork from the tank test contractor, ECMS indicated that a new vent pipe needed to be installed and the lines needed to be cleaned. A TANKMAN printout regarding the 4,000-gallon oil tank indicated that a decision was made not to re-test the tank because there were no visible leaks within the system. It is not clear whether a new vent pipe was installed or whether the lines were cleaned, as was recommended by the tank test contractor.

According to the hazardous materials section of the Edwards and Kelcey screening report, a tank test failure was reported to the NYSDEC Spills Information Database on March 27, 1997. Also, according to the screening report, a tank overfill on January 6, 1989 was reported to the Leaking Underground Storage Tank (LUST) list. The tank overfill resulted in three inches of oil in the elevator shaft; the file was closed on February 13, 1989 following site cleanup. During a limited site inspection by AKRF in June 2003, the tank vault was noted to be a confined space; therefore this area was not inspected by AKRF.

A historic PBS Registration certificate dated November 17, 1997 included the same PBS ID number and listed three storage tanks at the facility. The 4,000-gallon tank #002 previously described was listed on this registration certificate as having been installed in July 1968. Two 275-gallon tanks (#003 and #004) were also listed on this registration certificate and were described as installed in August 1975. AST-INFO printouts dated March 27, 1995 and December 16, 1996 for tanks #003 and #004, respectively indicated that these aboveground tanks contained diesel fuel. The AST-INFO printouts for the two 275-gallon diesel tanks indicated that the tanks were used historically for an emergency generator, and were encased in a concrete block structure in the kitchen/basement area. Comments on the AST-INFO printout indicated

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that the tanks needed to be emptied of their contents prior to removal, and a diesel fuel odor was noted in December 1996. AST-INFO printouts indicated that these tanks were removed by the Office of General Services on August 3, 1999. A Substantial Tank Modification Application dated August 2, 1999 listed the PBS ID #23392049, and indicated that tanks #003 and #004 were closed or removed in August 1999. The tanks were described on this form as having no internal or external protection, secondary containment, leak detection, or spill or overfill protection. No test dates were listed for the tanks. It should be noted that part of the copy of this form provided to AKRF was obscured by a post-it note. Access to the former tank location was not available at the time of our limited site visit; the door was locked due to lead contamination in the kitchen.

#### Underground Storage Tanks (USTs)

A UST-INFO printout dated November 18, 1994 listed one 2,000-gallon steel underground gasoline storage tank at the Armory. The tank was described as having been installed in June 1960 with no internal or external protection, secondary containment, leak detection, or spill or overfill protection. The UST-INFO printout indicated that the tank was registered as a 2,000-gallon tank but was later determined to be two, 575-gallon tanks. The tanks were located along the north side of the building along 67<sup>th</sup> Street and are listed in the UST-INFO printout as having been removed on April 12, 1994. The printout also indicates that a soil sample taken in the excavation area contained constituents under the NYSDEC regulatory levels. Additional paperwork provided to AKRF regarding the removal of these two 575-gallon underground gasoline tanks included: Division of Military and Naval Affairs (DMNA) drawings dated April 10, 1992 showing tank and piping locations; construction permit # 93095 dated December 21, 1993 for tank removal activities under contract # D000838; the DMNA Project Manual provided to the contractor (Resource Conservation Corp. of Pompton Lakes, NJ) for the work, described as project #039192; a New York State Contract Reporter Insertion form describing the project as contract #039192; and a copy of soil sample analytical results for project #PAA-312, PO #PAA2479-94, from ExpressLab dated May 31, 1994. The soil analytical results were for sample #/ID C-1, collected on May 19, 1994, and analyzed for volatile organic compounds (VOCs) by EPA Method 8021. Methyl Tertiary Butyl Ether (MTBE) was detected at a concentration of 18 parts per billion (ppb); no other VOCs were detected. No information was provided regarding sampling locations within the tank excavation or field observations during tank excavation.

#### Lead

Documentation regarding lead contamination in the basement level firing range and kitchen areas dates back to 1993. Abatement records are incomplete, but indicate that the firing range and kitchen were cleaned in January and May of 1997. Clearance dust samples collected after the January cleaning indicate lead levels of 211 to 5,454 micrograms per square meter ( $\mu\text{g}/\text{m}^2$ ) in the kitchen and 4,093 to 90,204  $\mu\text{g}/\text{m}^2$  in the firing range. Firing range lead levels after a firing in February 1997 were 298,787.88  $\mu\text{g}/\text{m}^2$  and kitchen lead levels in August 1997 were 11,279.07  $\mu\text{g}/\text{m}^2$ . Kitchen lead levels after a flood in August 1998 were 629 to 673  $\mu\text{g}/\text{m}^2$ .

The US Navy clearance standard for interior floors of firing ranges is 200  $\mu\text{g}/\text{m}^2$ , according to Technical Manual NEHC-TM6290.9910. The US EPA/HUD clearance levels for residential housing is 40  $\mu\text{g}/\text{m}^2$ . Lead in dust levels in the kitchen and firing range are considerably higher than these clearance levels.

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There is a possibility of lead contamination underneath the basement firing range. AKRF was not provided access to the shooting range area during the limited site inspection in June 2003, but was informed that the range has a solid concrete floor.

Limited testing of building components by DMNA, Allied Lead Services, CAI Environmental, Adirondack Environmental Services, Analytical Laboratories, Advanced Environmental Control, and Eastern Analytical Services indicate that lead paint was used throughout the building. US Department of Housing and Urban Development (US HUD) considers lead levels of greater than or equal to 1.0 milligrams (mg) lead per square centimeter ( $cm^2$ ) of substrate toxic levels of lead. Kitchen walls, door jambs, and casings; red paint from a second floor office; the fifth floor hallway ceiling; the bullet trap; and window frames, radiators, and metal covers on the 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> floors were found to contain greater than 1.0  $mg/cm^2$  lead. The Clark Room ceiling was found to contain no lead.

#### Asbestos

Documentation regarding asbestos analyses and asbestos abatement dates back to 1994. Abatement records are incomplete, but indicate removal of asbestos-containing materials (ACMs) from the roof, basement, boiler room and rifle range. Asbestos bulk sample analysis records indicate that pipe and pipe fitting insulation, breeching insulation, roofing materials, window glazing, perimeter sealant and floor tiles are ACMs. Limited sampling of plaster wall and ceiling materials indicate that these materials are not ACMs.

A New York State Office of General Services (OGS) project manual and figure from February 17, 1993 indicate the removal of approximately 3,000 linear feet of exposed pipe insulation and 60 linear feet of breeching insulation from the administration basement. A note on the figure indicates asbestos above the ceiling was to be left in place. Asbestos abatement records consisting of air monitoring results and asbestos waste manifests from June and July 1999 may correspond to removal of portions or all of these materials.

Air sampling results indicate that portions of the "Armory Hanger Roof" were removed in May and June, 1994. No further documentation was provided for this abatement. Copies of Federal and State notification forms, which are not dated or signed, were transmitted from East Coast Services, Inc. to K. G. Roofing in September 1997. The forms indicated the removal of 6,500 square feet of roofing. A letter indicates that abatement was to start on November 3, 1997. Air monitoring results from November 4 through 10, 1997 and an asbestos waste manifest from November 10, 1997 indicated that portions or all of this roof abatement project was completed in 1997. No figures or descriptions indicating the locations of these two roof abatement projects were included in the documentation provided to AKRF. Roofing materials on the second floor roof, 67<sup>th</sup> Street side, were determined to be ACM in April 1998.

Based upon a review of the available documentation, it is apparent that asbestos-containing roofing materials and pipe insulation have been removed from the armory. Records indicate that ACMs remaining in the building may include asbestos above ceilings in the basement; window glazing and perimeter sealant, floor tiles, spray-on fireproofing, and roofing materials. Additional suspect ACMs observed by AKRF include vinyl floor tiles and associated mastics, cove base and associated mastics, and stair coverings and associated mastics. Testing of these materials was not included in AKRF's scope of services.

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#### Air Emissions

An air emissions compliance failure report dated 2002, reference #T009, indicated that the two boilers located in the basement of the Armory require air emissions permits or an operating certificate. The source of the report is unclear and no information was provided to AKRF concerning rectification of this compliance failure.

A Program Report dated January 20, 1999, issued by the State of New York Office of General Services, Design and Construction Group, proposed a scope of work that included removal and replacement of both boilers, and provision of boiler draft control, smoke capacity monitoring and fuel regulating valves in accordance with New York City Bureau of Air Resources guidelines. It is not clear whether this scope of work was ever completed at the Armory.

#### Hazardous Waste Disposal

EPA Hazardous Waste Generator ID #NY 0000303461 was allocated to the Armory on November 27, 1995. Hazardous waste manifests accompanying this paperwork indicated that the Armory disposed of the following wastes in the period January 1995 to June 1995: methanol, flammable liquids and solids, mercury, lithium batteries, empty drums, aerosols, corrosive liquids, and sulfuric acid.

#### Potable Water Quality

A water analysis report from Peneault Associates, Inc. dated October 23, 1996, indicated that a water sample collected in the first floor latrine slop sink contained no total coliform and no E. Coli bacteria.

#### Other Environmental Concerns

High-intensity discharge (HID) lamps were observed on the drill floor and fluorescent lamps were observed throughout the Armory by AKRF during our June 2003 limited site visit. HID and fluorescent lamps, including mercury vapor lamps, contain mercury. Fluorescent lighting fixtures observed in inspected areas may include PCB-containing components, including capacitors, and potting compounds. Electrical transformers may be located within the study building. Unless labeled as dry-type, transformers and wall mounted electrical panels and switchboards may contain PCB-containing oil. No evidence of leaks or stains was noted by AKRF during the June 2003 limited site visit.

#### Plaster Ceiling Stability

Although not relating to environmental issues, a report dated August 27, 1997 prepared by the Office of General Services describing limited plaster ceiling testing at the Armory was included in the file provided by the Seventh Regiment Armory Conservancy and was reviewed by AKRF. Several ceilings in the first through third floors of the building were found to have unstable ceilings due to a high sand content in the plaster. It was recommended that all areas with ceilings tested and found unstable, or untested and potentially unstable, be closed and that items such as chandeliers be removed or shored. A scope of work including ceiling restoration was proposed. It is not clear whether this scope of work was implemented.

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### Conclusions and Recommendations

A 4,000-gallon aboveground fuel oil storage tank is present in the basement of the Armory. The EPA Oil Pollution Regulation, 40 CFR 112, requires that certain facilities storing oil and oil products prepare and implement a Spill Prevention, Control and Countermeasures (SPCC) Plan to prevent any discharge of oil into waters of the United States. Facilities subject to SPCC regulations are those where the aggregate aboveground oil storage capacity exceeds 1,320 gallons or where the total underground storage capacity is greater than 42,000 gallons. An SPCC Plan is a detailed, site-specific written description of how a facility's operation complies with the guidelines of SPCC regulation. The SPCC Plan should address operating procedures to prevent the occurrence of a spill and outline countermeasures to contain, clean up and mitigate the effects of an oil spill that impacts U.S. waters. Regulated oil storage facilities are also required to implement control measures to prevent a spill from entering U.S. waters, which can include the installation of secondary containment structures wherever practicable and effective. The New York State Department of Environmental Conservation should be contacted to confirm that the Leaking Underground Storage Tank (LUST) report for the facility is closed and the PBS registration should be reviewed to confirm it is correct and up to date. Aboveground tanks were historically located in the kitchen. AKRF recommends performing a visual inspection of the former tank location to check for evidence of leaks, overfills, and floor drains. If floor drains, or other exposure pathways are present, further investigation may be appropriate.

Documentation indicated that an 2,000-gallon underground gasoline storage tank was removed from the north side of the Armory in 1994. AKRF recommends obtaining a copy of the tank removal report from Resource Conservation Corp. including visual description and photographic documentation of tank excavation, if available.

The basement level firing range and kitchen are contaminated with lead dust from firing range operations. While these areas have been cleaned, lead in dust levels in these areas are still above US EPA/HUD and US Navy clearance standards. AKRF recommends re-cleaning and subsequent re-testing of the kitchen and firing range, and testing the basement near the firing range and kitchen to ensure that contamination has not spread outside of these areas. The appropriate clearance level will depend on the end use of these areas. AKRF recommends inspecting the firing range area to confirm the construction and integrity of flooring. If the floor is in good condition and provides an adequate barrier, there is no need for further action. If the floor is not in good condition, or if floor drains or drywells are present, additional investigation may be necessary to confirm soil quality under the firing range.

Records indicate that the vehicles may have been maintained on the drill floor. AKRF recommends inspecting underneath wooden flooring in several locations to confirm the presence of a concrete slab. If a concrete slab is present and has good integrity there is no need for further action. If no slab or a broken slab is present, soil samples may need to be collected from underneath the wooden drill floor to confirm soil quality. Floor drains were observed throughout the basement of the Armory by AKRF during our limited site visit in June 2003. AKRF recommends inspecting floor drains throughout basement and sampling of drywell sediments if the floor drains are found to be connected to drywells.

Documentation indicated that lead paint was used sporadically throughout the building. AKRF recommends performing a comprehensive, non-destructive lead paint survey of building components and maintenance of known and suspect lead paint in good condition.

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Asbestos records indicate that pipe and pipe fitting insulation, breeching insulation, roofing materials, window glazing, perimeter sealant and floor tiles are asbestos containing materials (ACMs). Abatement records indicate removal of ACMs from the roof, basement, boiler room, and firing range. AKRF recommends performing regular inspections and maintenance of known and suspect ACMs in good condition in accordance with applicable regulations. Prior to any renovation, demolition or roof replacement project, a NYC-certified asbestos investigator must inspect the affected areas to determine if the project will disturb ACMs. Affected ACMs must be removed prior to any construction or demolition activities.

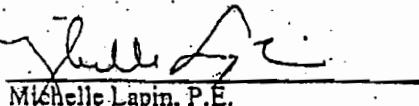
HID and fluorescent lighting was observed throughout the Armory. There was no evidence of leaks or stains from lighting fixtures and they do not currently present a potential hazard to building occupants. AKRF recommends periodic inspection to ensure lamp housings and protective barriers are in good condition. If disposed, HID and fluorescent lamps must be disposed of or recycled in accordance with applicable regulations.

An air emissions compliance failure report dated 2002 indicated that the boilers require air emissions permits or an operating certificate. AKRF recommends confirming that appropriate air emissions permits/operating certificates have been obtained for the boilers.

Plaster ceilings throughout the Armory were determined to be unstable due to a high sand content. AKRF recommends confirming that all identified and potentially unstable plaster ceilings have been restored to a safe condition.

We appreciate the opportunity to provide you with our services. If you should have any questions or comments, please do not hesitate to contact me at 646-459-3520.

Sincerely,  
AKRF, Inc.

  
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Michelle Lapin, P.E.  
Senior Vice President

**Reviewed Documents**  
**7th Regiment Armory Coheservancy**  
**New York, New York**

Issue	Document Date	Document Type	Document Author	Details
Environmental	1/21/1993	Project Manual	Division of Military and Naval Affairs	Removal of two underground gasoline tanks.
Environmental	1/18/1994	UST Info	Unknown	Tank removal.
Environmental	2/24/1995	Manifest	Division of Military and Naval Affairs	Hazardous waste manifests.
Environmental	3/27/1995	AST Info	Unknown	Removal of 4,000-gallon aboveground tank canceled.
Environmental	1/27/1995	Haz Waste Notification	US Environmental Protection Agency	Acknowledgement of notification of hazardous waste activity.
Environmental	1/21/1996	Laboratory analyses	Padreall, Assoc.	Coliform and E. Coli results.
Environmental	1/26/1996	AST Info	Unknown	Tank removal.
Environmental	1/24/1996	Memo	Division of Military and Naval Affairs	Memo regarding removal of 2,275 gallon tanks from kitchen.
Environmental	1/8/1997	Memo	MNFE-EC	Memo outlining areas of environmental/safety/health issues. Landmark status, lead in range, asbestos throughout including pipe insulation, spray-on fireproofing, most of pipe in basement hallways has been replaced. 4000-gal fuel oil AST has had leaks, 2,275-gal general fuel tank in kitchen removed in near future. Air permit. Lead based paint - no testing. IAC - NGB did a study and gave it to MNFE-EC.
Environmental	1/17/1997	PBS Registration	NYS Department of Environmental Conservation	Historical PBS Registration Certificate.
Environmental	8/21/1999	PBS Application	Division of Military and Naval Affairs	Removal of 2,275-gallon tanks.
Environmental	4/27/2001	Report	Edwards & Kelcey	Hazardous materials section from final screening.
Environmental	2/2/2002	PBS Registration	NYS Department of Environmental Conservation	Registration for 4,000-gallon aboveground storage tank.
Environmental	none	Compliance Report	New York City	Boilers do not have New York City air emissions permit or operating certificate.
Asbestos	5/1/1984	specification	NYS Office of General Services	Repair roof on 6th street side of armory. No haz mat future of work area.
Asbestos	1/1/1985	Laboratory analyses	CT Mate	Bulk sample in range area and shelter - unknown materials are positive.
Asbestos	10/31/1988	report	Hall-Kimbrell	Asbestos Assessment Report - Seventh Regiment Terminus Club. Pipe and pipe insulation throughout the terms club determined to be ACM. Two samples of plaster - nonACM.

Issue	Document Date	Document Type	Document Author	Details
Asbestos	12/15/1988	laboratory analyses	Ct Male	Air samples collected in mens shower; basement entrance; tennis club, ladies club, ladies club lounge. No reference to project.
Asbestos	2/24/1989	project manual	NYS Office of General Services	Replace roofs (1,000 SF each) on 2 towers located at bottoms of Lexington Ave, 86th and 67th Street. No final.
Asbestos	6/9/1989	project manual	NYS Office of General Services	Remove asbestos from basement storage area behind the stage.
Asbestos	8/29/1989	letter report	Karman	Asbestos sample results following plywood wall removal. All samples collected behind stage.
Asbestos	11/15/1989	letter report	NYC GAS Shelters	November 15-17 removed 75' ft pipe insulation and wrapped 40' ft pipe insulation in basement. Air samples attached.
Asbestos	2/17/1993	project manual	NYS Office of General Services	Asbestos abatement project. Samples of pipe, pipe elbow, breaching, bats valve insulation in boiler room, pipe and hanger bolts outside boiler room. In bathroom and ladies room, in laundry room, and kitchen.
Asbestos	2/17/1993	figure	NYS Office of General Services	Figure indicates removal of approx 3,000 LF of exposed pipe insulation and 60 LF of breaching insulation from administration basement. Note: 2 asbestos above ceiling to be left in place.
Asbestos	5/5/1993	Violation	NYS DOL	Vibration for not maintaining surfaces free from accumulation of asbestos dust in workshop NW corner and Boiler room - steam pipes in bulk areas positive.
Asbestos	10/18/1993	laboratory analyses	Calibrations	Asbestos results: 3rd floor bathroom wall covering is negative.
Asbestos	10/19/1993	laboratory analyses	Calibrations	Asbestos results for 3rd floor bathroom wall breaching and pipe insulation (negative).
Asbestos	10/29/1993	laboratory analyses	Calibrations	Asbestos results 3rd floor bathroom TSI pipe insulation, wall plaster and debris are negative.
Asbestos	11/30/1993	laboratory analyses	Calibrations	Air quality samples collected in 3rd floor bathroom - all results within acceptable levels.
Asbestos	4/25/1994	laboratory analyses	Calibrations	Asbestos results TSI pipe covering in first floor storage room, 87th street side - positive.
Asbestos	5/4/1994	notification	Breathe Easy	Asbestos results calling in finance department supply room ceiling is negative.
Asbestos	5/23/1994	laboratory analyses	Rapid Environmental Management	OGS notification form for replacement of BMN roof roof - \$5,000 replacement fees between 5/23/94 and 8/13/94.
Asbestos	5/23/1994	laboratory analyses	Rapid Environmental Management	Air sampling results for Armory hanger roof, 5th floor, east side - pre-abatement samples.
Asbestos	5/31/1994	laboratory analyses	Rapid Environmental Management	Air sampling results for Armory hanger roof - during abatement samples.
Asbestos	6/1/1994	laboratory analyses	Rapid Environmental Management	Air sampling results for Armory hanger roof - during abatement samples.
Asbestos	6/2/1994	laboratory analyses	Rapid Environmental Management	Air sampling results for Armory hanger roof - during abatement samples.

Issue	Document Date	Document Type	Document Author	Details
Asbestos	8/3/1994	laboratory analyses	Rapid Environmental Management	Air sampling, results for Amory hanger roof - during abatement samples
Asbestos	3/23/1995	laboratory analyses	Calibrations	Asbestos lab results for 27 RAOC supply room - TSI pipe insulation is positive, ceiling and wall materials are negative
Asbestos	7/12/1996	laboratory analyses	Calibrations	Bluff samples of roof - 87th Street side - positive
Asbestos	7/25/1996	laboratory analyses	Calibrations	Roofing, NE corner/kitchen/stk St side - 2nd and 3rd layers are positive
Asbestos	9/24/1997	transmittal	East Coast Services	1st layer test by PLM only
Asbestos	9/24/1997	notification	East Coast Services	Transmittal for notifications, company license, meeting info
Asbestos	9/24/1997	notification	East Coast Services	NYS notification - not dated - removal of 6,500 SF of mobility
Asbestos	10/29/1997	letter	Division of Military and Naval Affairs	EPA notification - not dated - 6,500 SF roofing Project: roofing holes - Contract D01-1032 - removal of 6,500 SF of roofing to start 11/1/97 and finish by 11/3/98
Asbestos	11/3/1997	laboratory analyses	Analytical Laboratories	Plaster in the Clark room ceiling on the 1st floor negative
Asbestos	11/4/1997	laboratory analyses	SciLab	Asbestos air monitoring results for roof deck removal by BSJ Laboratories
Asbestos	11/4/1997	laboratory analyses	SciLab	Air monitoring results 11/4/97 - Roof abatement
Asbestos	11/5/1997	laboratory analyses	SciLab	Air monitoring results 11/5/97 - Roof abatement
Asbestos	11/6/1997	laboratory analyses	SciLab	PCM fiber results for roof work on 11/6/97 - BSJ Consultants
Asbestos	11/10/1997	manifest	East Coast Services	Asbestos manifest for 402 (hard to read) cubic yards
Asbestos	11/10/1997	laboratory analyses	SciLab	Air monitoring results 11/10/97 - Roof abatement
Asbestos	11/12/1997	letter report	BSJ Laboratories	Air monitoring results for roof removal on Nov 3-5-10/1997 Transmittal for waste manifest for disposal of asbestos materials removed from roof
Asbestos	12/3/1997	transmittal	KG Roofing	
Asbestos	2/16/1998	transmittal	KG Roofing	Transmittal for roofing clearance, application for permit. No Haz mat.
Asbestos	4/21/1998	laboratory analyses	Analytical Laboratories	Roofing on the 2nd floor - 67th Street side - 2nd layer - positive
Asbestos	4/22/1998	chain of custody	Analytical Laboratories	COC for roofing on the 2nd floor roof - 67th Street side - 2nd layer - positive (43)
Asbestos	4/24/1998	laboratory analyses	Analytical Laboratories	Asbestos sample of 5th floor gym ceiling. Negative
Asbestos	4/30/1998	manifest	Acoustic	Asbestos manifest for 83 cubic yards by Acoustic of Brooklyn
Asbestos	5/10/1998	laboratory analyses	CAL Environmental	Asbestos results for 3rd, 4th and 5th floor - window cladding, perimeter sealant, bridge, floor tile, and pipe asbestos insulation ACM, plaster, Regatta - g. samples
Asbestos	6/11/1998	laboratory analyses	Quality Environmental Solutions & Technologies	Air monitoring results - no work area provided. 6/11/98, 6/15/98-6/16/98, 6/21/98, 7/13/99, 7/15/99-7/16/99
Asbestos	6/19/1998	manifest	ALAS	acm manifest - 30 bags
Asbestos	6/19/1998	manifest	ALAS	Asbestos manifest - 30 bags by ALAS of Brooklyn
Asbestos	6/21/1998	manifest	ALAS	acm manifest - 28 bags
Asbestos	6/21/1998	manifest	ALAS	Asbestos manifest - 28 bags by ALAS of Brooklyn
Asbestos	6/23/1998	manifest	ALAS	acm manifest - 28 bags
Asbestos	6/23/1998	manifest	ALAS	Asbestos manifest - 28 bags by ALAS of Brooklyn

Issue	Document Date	Document Type	Document Author	Details
Asbestos	7/29/1999	manifest	ALAS	Asbestos manifest - 40 bags
Asbestos	7/29/1999	manifest	ALAS	Asbestos manifest - 407 bags by ALAS of Brooklyn
Asbestos	8/23/1999	Memo	MNFE	"Several areas have been abated including the boiler room, kitchen, and pipe tunnel along 60th Street side. All asbestos has not been removed from the basement areas. Demolitive testing has not been accomplished for the entire basement."
Asbestos and Lead	9/17/1999	transmittal	NYS Office of General Services	asbestos and lead test sampling reports for the steam distribution replacement project from NYS OGS to Roy Thompson of DMVA
Asbestos	1/18/2000	transmittal	NYS Office of General Services	Waste manifest for removal of asbestos at Kitchell and Health Unit by glovebox. References removal of two diesel fuel tanks.
Asbestos	8/3/2001	transmittal	Division of Military and Naval Affairs	Response to request for information from DMVA to Conservancy basement steam pipe replacement yielded 116 bags of ACM waste off 4 main leads.
Asbestos	8/27/2001	manifest	AAC Contracting	Two bays of breeching by bolt, seals. No work area indicated.
Asbestos	None.	license	East Coast Services	Copy of ECS asbestos handling license.
Asbestos	None	specification	Unknown	Partial specification for asbestos abatement. No quantities or work areas included.
Indoor Air Quality	1/24/1994	report	NGB	Report of indoor air quality issues in armory. Recommend actions: increase outside air, consistent temperature and humidity, replace filters, ac units, discontinued smoking, program for maintenance of ventilation diffusers and grills, repair damaged ACM pipe in the mens shower, remove water damaged materials.
Indoor Air Quality	3/10/1994	Memo	OIC&C	Response to recommendations of IAQ report. Work orders/facilities promised to comply will all except increase air.
Lead	12/15/1993	transmittal	NYARNG	Transmittal for range standard operating procedures, NAC proposal for lead cleanup, blank required activity notification form.
Lead	12/15/1993	SOP	Seventh Regiment Rifle Club	Standard Operating Procedures for firing range. Includes daily housekeeping for lead.
Lead	2/22/1994	proposal	NAC	Proposal for lead abatement in firing range.
Lead	5/9/1994	Memo	NYARNG	Commitments to conditions for re-opening of range.
Lead	5/17/1994	Memo	Division of Military and Naval Affairs	Conditions for re-opening of range. Rifle Club is responsible for hazardous wastes disposal.
Lead	12/16/1996	laboratory analyses	SciLab	Lead dust levels: on top of its machine 4,109 and range floor at entrance 7,008 mg/m <sup>3</sup> .
Lead	1/31/1997	laboratory analyses	Eastern Analytical Services	Lead dust levels: pistol ranges at fire point - 208,787.88 mg/m <sup>3</sup> .
Lead	1/8/1997	transmittal	Analytical Laboratories	Lead clearance results for dust samples - not attached. XRF for Kitchell Wall 2.5 4.2 mg/m <sup>2</sup> and bullet trap 10-14 mg/m <sup>2</sup> .

Issue	Document date	Document Type	Document Author	Details
Lead	4/7/1997	letter	Division of Military and Naval Affairs	Lead testing in the kitchen on 12/12/96 were above permissible exposure levels - lead in air samples not attached. Bon Secours Health Services for kitchen and range attached. Ordered to close kitchen until further notice.
Lead	11/17/1997	laboratory analyses	Advanced Environmental Control	Kitchen lead levels on 1/17/97 - floor 4-5.13 [light] 2. top finish 0.45 [light] 2.5/200 [light] (original test for Allied Lead Services)
Lead	1/29/1997	laboratory analyses	Advanced Environmental Control	Kitchen (211-745 [light]) and range (4,093-90,204 [light]) lead levels on 1/29/97 - after cleaning. (for Allied Lead Services)
Lead	2/7/1997	letter	Division of Military and Naval Affairs	Letter reinforcing no further access to use of the range until it is in full compliance with NGB 1993-305-15 and 29 CFR 1910.
Lead	2/21/1997	laboratory analyses	Eastern Analytical Services	Lead dust kitchen floor 1.1-27.9.07 [light] 12.
Lead	3/13/1997	laboratory analyses	Eastern Analytical Services	Lead dust (floor, range) 9.4-73.88 [light] 12, side wall of range 5.040.94 [light] 12.
Lead	4/25/1997	laboratory analyses	Eastern Analytical Services	Lead dust (floor, range) 0.715.91-1.4-261.36 [light] 12.
Lead	5/6/1997	letter report	Analytical Laboratories, Analytical Laboratories	Cleaning results for lead dust. No results attached to letter.
Lead	9/5/1997	letter report	Analytical Laboratories	Lead results from Clark Room Cleaning - no lead detected.
Lead	9/17/1997	letter	Seventh Regiment Rifle Club	Club tested air in range during firing - round elevated levels of airborne lead at 100 ft white shooting range. Request reoperating of range. Question use of OSHA levels by D&A for cleaning of range.
Lead	9/24/1997	letter	Analytical Laboratories	Test of range should remain closed.
Lead	10/28/1997	laboratory analyses	Sci. lab	Lead dust levels in exhaust duct 210,900 [light] 12.
Lead	11/12/1997	letter	Division of Military and Naval Affairs	Letter to contractor. Work in delayed due to lead contamination in kitchen.
Lead	12/16/1997	laboratory analyses	Adirondack Environmental Services	Lead sample red paint from 2nd floor office - 26.6% lead
Lead	8/17/1998	laboratory analyses	Analytical Laboratories	Lead dust level on kitchen floor 625-573 [light] 12.
Lead	9/14/1998	laboratory analyses	Sci. lab	Lead dust level on kitchen floor 1-290 [light] 12.
Lead	9/17/1998	laboratory analyses	Division of Military and Naval Affairs	Lead on 5th floor hall ceiling and 643 Park kitchen floor. Hall ceiling positive.
Lead	1/22/1999	laboratory analyses	Advanced Environmental Control	Kitchen paint XRF results - masonry walls, wood door jambs and cabinets are positive (for Allied Lead Services)
Lead	4/7/1999	letter report	MNFE	Lead results at 3rd floor - kitchen lead levels on 1/22/97 1-325-25-200 [light] 12. After cleaning 1/3/97 kitchen levels from 2-1-5-45 [light] 12 and range from 1-193-90-204 [light] 12. Pistol range levels after firing on 2/4/97 298-787-88 [light] 12. Kitchen on 2/2/97 1-279.07 [light] 12. Kitchen after flood on 8/1/98 629-473 [light] 12. Next to oil tank after flood on 9/17/98 1-290 [light] 12. Reconditioned kitchen - kitchen areas off limit until cleaned and released.
Lead	9/17/1999	laboratory analyses	CAI Environmental	Lead results for 3rd, 4th and 5th floor building components - window frame, radiator, insulation, radiator, and metal covers are positive.

Issue	Document Date	Document Type	Document Author	Details
Other	1/11/1995	construction estimate.	NYS Office of General Services	Cost estimate for replacement of windows - no hazard issues
Other	12/8/1997	Memo	Fordham U Harnessless Project	Duct in glass block figures - no hazard issues
Other	6/25/2002	Memo	NYARNG	Memo voicing concerns about dust and dirt in work areas and asking for guidance from OSCSG. Duplicate document.
Other	8/27/1997	Report	NYS Office of General Services	Duplicate document.
Other	1/20/1989	Letter Report	NYS Office of General Services	Rehabilitation of decorative plaster ceilings. Boiler replacement project discussion.

EXHIBIT N-3

PHASE II ENVIRONMENTAL SITE ASSESSMENT

**PHASE II ENVIRONMENTAL SITE ASSESSMENT**

of

THE SEVENTH REGIMENT ARMORY  
643 Park Avenue  
New York NY 10169

performed for

Seventh Regiment Armory Conservancy  
200 Madison Avenue, 5<sup>th</sup> Floor  
New York, NY 10016

July 1, 2004

prepared by



Warren & Panzer Engineers, P.C.  
228 East 45<sup>th</sup> Street-10<sup>th</sup> Floor  
New York, NY 10017

WP PROJECT NO: 1199.01.01

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**APPENDICES**

Appendix A – Phase I Environmental Assessment
Appendix B – Laboratory Report of Asbestos Analysis
Appendix C – Laboratory Report of Lead Paint Chip Analysis
Appendix D – Laboratory Report of Lead Dust Wipe Analysis
Appendix E – Laboratory Report of TCLP Analysis for Lead

## INTRODUCTION

The Seventh Regiment Armory, constructed between 1877 and 1881 consists of two main sections, the Headhouse and the Drill Hall. The Headhouse is a 5 story, castle-like building, and the Drill Hall is a large open structure with an 80 foot high truss roof. The Drill Hall has open floor space (without columns) of approximately 55,000 square feet. The Drill Hall and the Headhouse are connected and occupy the entire city block of East 66<sup>th</sup> and East 67<sup>th</sup> Streets between Lexington and Park Avenues.

Warren & Panzer Engineers, P.C. (W&P) has been retained by the Seventh Regiment Armory Conservancy to investigate the property for the presence of Lead-based paint (LBP) and Asbestos-containing materials (ACM). A limited Phase I Environmental Assessment was conducted by AKRF in December 2003 (a copy is provided at Appendix A). The Phase I report identified locations of past asbestos abatement, lead dust contamination in the rifle range and several other areas with current potential asbestos and lead issues. The goals of W&P's Phase II investigation were to further characterize and quantify the types of ACM and LBP present throughout the entire Armory Facility.

The lead dust contamination investigation included an inspection and environmental sampling of the cellar areas in order to determine lead contamination from the rifle range. W&P conducted a full site survey and sample collection from June 14 to 16, 2004. Mr. James Scullin of W&P, a NYS and NYC licensed asbestos inspector and an EPA NYS licensed Lead Paint Risk Assessor conducted the survey and sampling. During the course of the survey a limited inspection for the presence of other environmental issues (such as PCBs and mercury) was also performed.

## ASBESTOS INVESTIGATION

### *Drill Hall*

Cellar Level – Spray on insulation material in the rifle range and fall out shelter area was sampled and analyzed. Analysis revealed the insulation to be ACM. The spray on material was located on columns and ceiling areas of the middle section of the rifle range. The insulation is in generally poor condition with several areas of loose, crumbling material. The amount of ACM present is approximately 10,000 square feet.

Main Level – Corrugated pipe insulation was observed on two lines of overhead pipes located in the storage rooms along the north side of the Drill Hall. Overhead pipes on the south side of the drill hall were bare and not insulated. Samples of the material from the north side were collected and analysis revealed the insulation to be ACM. The insulation is overall in good condition. The amount of ACM present is approximately 800 linear feet.

### *Headhouse*

Cellar Level – Fiberglass insulation material was observed on overhead pipes throughout the entire east side of basement (with the exception of the kitchen area outside the Pistol Range). Plaster type insulation material was present on several elbow sections of the same pipe system that was covered with the fiberglass. The plaster type insulation was

sampled and no asbestos was detected. In the kitchen area outside the Pistol Range corrugated insulation was observed on overhead piping. The material was in poor condition with rips and holes. Analysis revealed the material to be ACM. The amount of ACM present is approximately 8 linear feet.

Along the west side of the basement asbestos containing corrugated insulation material was present in the ceiling cavity of the men's shower room and adjacent area. The total amount present could not be visually estimated. Approximately, 10 linear feet of ACM on overhead pipe insulation was observed in good condition, above the locker area's drop ceiling.

In the Boiler Room suspect insulation material was observed on the Boiler flues. The insulation was located underneath metal sheeting and was accessible near an access panel. Samples were collected and no asbestos was detected.

First Floor – Asbestos containing material on insulation of a vertical pipe riser was observed in the Field Officers and Staff Officers room. The material was in good condition and approximately 15 linear feet of ACM is present.

In the Adjutants office there is a small private bathroom with 9"x 9" floor tile. The material and associated mastic were sampled; analysis revealed that no asbestos was detected.

Second Floor – No asbestos containing materials present.

Third Floor – Inside Room 304 analysis of 9"x9" floor tile revealed the presence of asbestos greater than 1%, thus classifying the tile and associated mastic as ACM. The floor tile was in good condition and approximately 700 square feet was present. Also inside Room 304 and 312 transite like paneling was observed on the inside of the wooden radiator covers. Analysis of the paneling revealed the material to be ACM. The material was in good condition and approximately 4 square feet of asbestos paneling was present at each radiator (two radiators total).

Inside Room 307 analysis of 9"x9" floor tile revealed the presence of trace levels of asbestos (less than 1%) thus it is not considered ACM.

Approximately 25 linear feet of ACM on insulation material of a vertical pipe riser was present in the rear office area of Room 306. The material was in good condition.

Fourth Floor – Rooms along the west side of the floor are split into lower and upper levels. 1'X1' floor tile is present on both levels of the following rooms; HHC 1/107, Co. A 1/27, Co. B1/107, Co. C HHC, CSC 2/07 and 2BDE. Analysis of the floor tile and associated mastic revealed the material to be ACM. The floor tile is in good condition and approximately 16,000 square feet is present.

Fifth Floor – No asbestos containing materials present

In addition to the areas mentioned above the asbestos investigation also included sampling of ceiling plaster, wall plaster and exterior window caulk/glaze from throughout the entire Headhouse and Drill Hall. Analysis of all plaster samples revealed no ACM present. In the Headhouse analysis of window caulk/glaze from windows on the first and second floors revealed the material to be ACM. For the purposes of this investigation, all window caulk/glaze of the Headhouse is classified as presumed ACM.

On the roof of the Drill Hall there are two sets of clerestory windows. Analysis of the caulk material revealed that no asbestos was detected.

Laboratory reports of all asbestos analytical results are provided in Appendix B.

**ASBESTOS SUMMARY TABLE**

Location	Type of Material	Condition	Estimated Quantity
Drill Hall			
Cellar Level (rifle range and fallout shelter area)	Spray on insulation	Poor	10,000 square feet
Main Level (north side storage rooms)	Corrugated Pipe Insulation	Good	800 linear feet
Headhouse			
Cellar Level			
Kitchen outside Pistol Range	Corrugated Pipe Insulation	Poor	8 linear feet
Bathrooms on Westside (inside ceiling cavity)	Corrugated Pipe Insulation	Good	10 linear feet
<i>First Floor</i>			
Field Officers and Staff Off. Room	Corrugated Pipe Insulation	Good	15 linear feet
<i>Second Floor</i>	NO ACM PRESENT		
Third Floor			
Room 304	9"x 9" Floor Tile	Good	700 square feet
Room 304 and 312	Transite like paneling inside radiator covers (two radiator covers total)	Good	8 square feet
Room 306 (rear office area)	Corrugated Pipe Insulation	Good	25 linear feet
Head House - Fourth Floor			
Room labeled HHC 1/107	1'x 1' Floor Tile	Good	2,500 square feet
Room labeled Co. A 1/27	1'x 1' Floor Tile	Good	2,500 square feet
Room labeled Co. B 1/107	1'x 1' Floor Tile	Good	2,500 square feet
Room labeled Co. C HHC	1'x 1' Floor Tile	Good	2,500 square feet
Room labeled CSC 207	1'x 1' Floor Tile	Good	2,500 square feet
Room labeled 2BDE	1'x 1' Floor Tile	Good	2,500 square feet
Fifth Floor	NO ACM PRESENT		

Exterior windows (Cellar to Fifth Floor)	Window caulk/glaze	Good	Approximately 200 windows
--	--------------------	------	---------------------------

NOTE: The following materials did not contain ACM:  
The window caulk/glaze of Clerestory windows on the Drill Hall roof.

Wall and ceiling plaster throughout the entire facility.

Insulation on boiler flues (Headhouse cellar).

Plaster type insulation of elbows and joints of overhead pipes (Headhouse cellar).

9"x 9" floor tile in Adjutant's office (Headhouse).

9"x 9" floor tile in Room 307 (Headhouse).

\*The roof membrane was not included in this survey

## **LEAD BASED PAINT INVESTIGATION**

An RMD-1 XRF detector was used to analyze painted surfaces for the presence of Lead Based Paint. The EPA definition of Lead Based Paint is paint that contains greater than 1.0 milligram of Lead per square centimeter of surface via XRF testing. Throughout the entire Headhouse and Drill Hall the vast majority of all painted walls, ceilings, radiators and wooden window components (sills, sashes and frames) were identified as containing Lead Based Paint. In the Headhouse the overall condition of painted surfaces is good, with a few exceptions where water damage has caused localized peeling and flaking. Also present in the Headhouse are wood doors, ornate wooden framing, and wainscoting located on each floor and in most rooms. No Lead Based Paint was present in these stained wooden surfaces. No Lead Based Paint was detected on the wood surfaces of the central staircase.

On the north and south sides of the Headhouse building there are staircases that begin at the second floor and terminate at the fifth floor. XRF testing of the painted surfaces of the metal banisters and railings of these staircases was inconclusive. In order to identify the presence of Lead Based Paint on the banisters and railings of these staircases, chip samples were collected and analyzed for lead content via Atomic Absorption method. The EPA definition of Lead Based Paint is paint that contains greater than 0.5% Lead by weight via analysis by Atomic Absorption. Analysis of all paint chip samples from the banisters and railing revealed the paint to be identified as Lead Based Paint.

Laboratory reports of paint chip analysis are provided in Appendix C.

In the Drill Hall Lead Based Paint was present throughout the entire interior. Painted surfaces of the walls located on the east and west sides of the interior space were in generally poor condition with several hundred square feet of surface area that was peeling and chipping. Painted surfaces on the Drill Hall's interior truss, north and south walls and the walls of the storage rooms were in good condition.

A survey of the building's exterior revealed Lead Based Paint on the following materials: painted surfaces of exterior window sills and frames, black metal fence around entire perimeter, black metal fire escapes, and black metal bars covering each first floor

window. Painted surfaces of the exterior doors and walls around the Lexington Avenue vehicle entrance did not contain lead based paint.

## LEAD BASED PAINT SUMMARY

### Surfaces with LBP

- Exterior fire escapes/stairwells
- Exterior perimeter fence
- Exterior window bars (First floor only)
- Exterior side of window frames, sashes and sills
- Banisters and railings of north and south stairwells in Headhouse (2<sup>nd</sup> to 5<sup>th</sup> floor)
- All painted radiators
- All interior painted walls and ceilings (with several exceptions noted below)
- All interior sides of painted window frames, sashes and sills (with several exceptions noted below)

Areas that do not contain Lead Based Paint:

### Headhouse

All interior wood doors, wood framing, wainscoting and other ornate wood surfaces.

Cellar – cement floors, brick walls of corridor, walls and ceiling of entrance foyer to elevator, and ceiling of Men's and Ladies' bathrooms.

First Floor – window sashes and frames of Reception Room, Board of Officers' Room, and Colonel's Room, interior wall partitions of Custodian's Office (Hors'g Equipment Rm) and Line Officer's Room.

Wood surfaces of central staircase.

Second Floor – window sashes and frames of First Colonel's Room Fourth Colonel's Room, Seventh Colonel's Room, and Ninth Colonel's Room, painted wallpaper on partitions of rear room inside Tenth Colonel's Room and ceiling of 11<sup>th</sup> Colonel's Room.

Third Floor - window sashes and frames of Rooms 302, 307, 308, and 310, interior wall partitions of Rooms 300, 305, 307, 309, and 311, and ceiling of Room 311.

Fourth Floor – hallway stucco walls, hallway ceiling, stucco walls of restaurant's dining room, ceiling of dining room, hallway partition walls at north and south stairwells, Men's and Ladies bathrooms, red paint on shelves, walk-in box and framing components of restaurant's kitchen, and interior partitions of Room 414.

Fifth Floor – window sashes and frames of glass brick style windows throughout the entire floor, walls of Conference Room, Storage Room and Office (formerly squash courts) located along the north side of the floor.

### Drill Hall

The green paint on the wooden floor material was non-lead based paint. Painted surfaces of the walls and doors around the Lexington Avenue vehicle entrance were non-lead based paint.

### **LEAD CONTAMINATION INVESTIGATION (RIFLE RANGE)**

Located below the south side of the Drill Hall is a closed down rifle range. The center and east sections of the rifle range space were converted into a storage area and fall-out shelter in the early 1950s. The section of the rifle range closest to the Head House was converted to a Pistol Range at an unknown time (post 1950s). The Pistol Range was completely closed in 1997 due to lead contamination problems. As part of this investigation dust wipe samples of the Pistol Range floor, Rifle Range/Fall-out Shelter floor, Kitchen floor outside the Pistol Range and Headhouse cellar level hallway floor (outside the kitchen) were collected.

Analysis of the dust wipes from the pistol range floor measured from approximately 1,000 to 73,000 micrograms of lead per square foot ( $\mu\text{g}/\text{ft}^2$ ). Results from two dust wipes of the Rifle Range/Fall-out Shelter floor were  $9,432 \mu\text{g}/\text{ft}^2$  near the target trap area and  $7,343 \mu\text{g}/\text{ft}^2$  near the Fall-out shelter area. A dust wipe from the cellar kitchen floor outside the Pistol Range measured  $1,020 \mu\text{g}/\text{ft}^2$ . A dust wipe from the cellar hallway floor directly outside the kitchen measured  $217 \mu\text{g}/\text{ft}^2$ . A dust wipe from the cellar hallway floor away from the kitchen near the main stairwell measured  $131 \mu\text{g}/\text{ft}^2$ . The EPA/HUD level of acceptable lead content in dust on floors is  $40 \mu\text{g}/\text{ft}^2$  for residential buildings. This value has been adopted by the New York City Department of Health as an acceptable level for indoor floors of any facility/building that is open to the public. The results of the investigation reveal extremely elevated levels of lead dust and confirm that lead dust has migrated into the Headhouse's cellar hallway.

Laboratory reports of the dust wipe analyses are provided in Appendix D.

Also, ventilation ductwork contaminated with lead dust is located in the Pistol and Rifle Range areas. In 1997 analysis of one dust wipe from inside a section of exhaust duct revealed lead levels of  $210,900 \mu\text{g}/\text{ft}^2$ . Approximately 100 linear feet of 3'X2' ductwork was observed. No samples of the ductwork were collected as part of this investigation.

In addition to the contaminated ductwork, many miscellaneous items such as lockers, furniture tools, benches, ammunition, target liner, bull's-eye paper, and fallout shelter supplies have been left behind. There are also three portable vacuums, one of which contains a lead warning label and a 5-gallon bucket of debris with a lead warning label. All of these items must also be identified as being contaminated with lead; thus disposal of these items must follow hazardous waste disposal procedures. In the Pistol Range there are accumulations of bullet fragments along the floor of the target trap area, which also must be disposed of as hazardous waste.

In the Rifle Range/Fall-out shelter area there is an accumulation of sand in the target trap area. No visible bullet fragments were observed in the sand. The sand is bordered by metal paneling and does not connect to the soil below the rifle range. Samples of the sand

were collected and analyzed via Toxic Characterization Leachate Procedure (TCLP) for lead content. Analytical results measured 3000 milligrams of Lead per Liter of leachate/water (mg/L) for sand in the lower target trap. The sand of the upper target trap measured 2700 mg/L. The EPA definition of hazardous waste for lead content via TCLP is 5 mg/L. Thus all sand in the target trap area is considered hazardous waste.

Laboratory reports of the TCLP analysis are provided in Appendix E

#### **OTHER ENVIRONMENTAL ISSUES**

Light fixtures and electrical panels throughout the Headhouse and Drill Hall may contain mercury or PCB oils. In the Drill Hall there are approximately 100 ceiling suspended high intensity light fixtures with possible mercury content. No sampling was conducted as part of this investigation. Future renovation projects will require sampling and proper disposal of any items that contain mercury or PCB oils. During the course of the site survey no transformers or other large electrical components were observed. Other than the light fixtures there were no sources of mercury or PCBs that were observed during the survey. No other hazardous waste materials such as waste oils, unidentified drums or batteries were present.

Sections of the Rifle Range/fallout shelter area have been subject to flooding and ponded water. A broken rainwater drain line was observed. In addition, there may be ground water intrusion from the floor of the rifle range. These conditions may result in microbial contamination and a future indoor air quality problem and should be promptly rectified.

## ABATEMENT COST ESTIMATES

## Asbestos

Type of Material	Estimated Quantity	Cost
Corrugated Pipe insulation	850 ln. ft.	\$13,000
Window caulk/glaze	200 to 250 windows	\$50,000
Spray on insulation	10,000 sq. ft.	\$150,000
Floor Tile	17,000 sq. ft.	\$85,000
Radiator panels	10 sq. ft. (2 panels)	\$1,000
	Sub total	\$299,000
Air monitoring Cost (@ 20%)		\$59,800
	<b>TOTAL</b>	<b>\$358,800</b>

## Lead Based Paint

Location/Type of Material	Estimated Quantity	Cost
Exterior metal fence	6,000 sq. ft.	\$48,000
Exterior fire escapes	2,000 sq. ft.	\$16,000
Exterior window bars	2,000 sq. ft.	\$16,000
Drill Hall walls (hall, rifle range and north cellar level)	100,000 sq. ft.	\$1,100,000
Drill Hall roof truss	10,000 sq. ft.	\$100,000
Headhouse north and south staircase railings	8,000 sq. ft.	\$64,000
Headhouse ceilings	80,000 sq. ft.	\$640,000
Headhouse walls	50,000 sq. ft.	\$400,000
Headhouse windows	200 to 250 windows	\$50,000
	<b>TOTAL</b>	<b>\$2,434,000</b>

## Lead Dust Decontamination/Disposal of Lead Debris the Rifle Range

Type of Activity	Estimated Quantity	Cost
Cleaning/Decon of Headhouse Cellar floors	8,000 sq. ft.	\$10,000
Cleaning/Decon of Pistol & Rifle Range floors & surfaces	40,000 sq. ft.	\$100,000
Removal and Disposal of Lead bullet debris of Pistol Range	1,000 lbs.	\$10,000
Removal and Disposal of sand from Rifle Range target traps	50 cubic yards	\$30,000
Removal and Disposal of lead contaminated items (lockers, supplies, furniture, etc.)	100 cubic yards	\$60,000
Removal and disposal of Ventilation ductwork	200 ln. ft.	\$30,000
	<b>TOTAL</b>	<b>\$240,000</b>

These cost estimates are budgetary in nature and are based upon analysis of costs associated with full-scale asbestos and lead abatement projects of similar scope that have occurred in the recent past. It should be noted that the estimated costs might be impacted by the economic climate, which may alter in the future.

## CONCLUSION

Warren & Panzer's investigation has revealed extensive asbestos and lead issues throughout the entire Seventh Regiment Armory Facility. All of these issues must be addressed through large-scale professional hazardous material abatement projects. At this time, there are no asbestos and lead issues that can be abated by the current management during routine operations and maintenance. The types and scopes of any abatement projects should be decided after the future use of the facility has been determined.

#### **DISCLAIMER**

This investigation did not utilize destructive sampling techniques. There may be additional hidden asbestos, lead and other hazardous materials present in the facility that might be discovered only during future renovation activities.

Respectfully submitted,

**WARREN & PANZER ENGINEERS, P.C.**

James Scullin  
Project Manager

Chet Bijoor, P.E., DEE  
Vice President

EXHIBIT N-4

PHASE II ADDENDUM REPORT

[Attached behind.]



Warren & Panzer Engineers, P.C.  
228 East 45<sup>th</sup> Street, 10<sup>th</sup> Floor  
New York, NY 10017  
Tel. (212) 922-0077  
Fax (212) 922-0630

April 12, 2006

Mr. Jack Dobson  
The 7<sup>th</sup> Regiment Armory Conservancy  
643 Park Avenue  
New York, NY 10019

RE: The 7<sup>th</sup> Regiment Armory, Phase II Environmental Investigation  
ADDENDUM REPORT  
WP# 1199.01.01

Dear Mr. Dobson:

Warren & Panzer Engineers, P.C. (W&P) authored a Phase II Environmental Investigation report dated July 12, 2004. The findings of that report did not discuss specific issues concerning lead or other hazardous material contamination present in ponded water located in the basement of the Drill Hall. At the time of the investigation areas of ponded water were observed in low lying sections of the former rifle range located in the basement of the Drill Hall. At the time of the investigation, no information was provided as to how long the ponded water was present, the cause of the water intrusion or any specific future plans for removing the water.

W&P wishes to clarify that dust wipe and bulk sampling confirmed the presence of lead contamination in the dust, debris and sand that was located in close proximity to the water. The lead contaminated dust, debris and sand was also submerged in the water. Therefore the water is considered assumed contaminated by lead until water testing determines otherwise. Such testing may also reveal the presence of other contaminants.

Efforts to identify the source of the water intrusion, test the water and remove the water were postponed so that these efforts could occur simultaneously with decontamination activities in the former rifle range. Water testing, disposal and water intrusion repairs have been addressed in the W&P abatement specifications and drawings dated January 2006.

Sincerely,

Warren & Panzer Engineers, P.C.

*James Scullin*

James Scullin  
Project Manager

EXHIBIT O

VENDOR RESPONSIBILITY QUESTIONNAIRE

[Attached behind]

**STATE OF NEW YORK**  
**VENDOR RESPONSIBILITY QUESTIONNAIRE**

FEIN #

<b>1. VENDOR IS:</b> <input type="checkbox"/> PRIME CONTRACTOR <input type="checkbox"/> SUB-CONTRACTOR			
<b>2. VENDOR'S LEGAL BUSINESS NAME</b>		<b>3. IDENTIFICATION NUMBERS</b>	
		a) FEIN #  b) DUNS #	
<b>4. D/B/A - Doing Business As (if applicable) &amp; COUNTY FILED:</b>		<b>5. WEBSITE ADDRESS (if applicable)</b>	
<b>6. ADDRESS OF PRIMARY PLACE OF BUSINESS/EXECUTIVE OFFICE</b>		<b>7. TELEPHONE NUMBER</b>	<b>8. FAX NUMBER</b>
<b>9. ADDRESS OF PRIMARY PLACE OF BUSINESS/EXECUTIVE OFFICE IN NEW YORK STATE, if different from above</b>		<b>10. TELEPHONE NUMBER</b>	<b>11. FAX NUMBER</b>
<b>12. PRIMARY PLACE OF BUSINESS IN NEW YORK STATE IS:</b>  <input type="checkbox"/> Owned <input type="checkbox"/> Rented  If rented, please provide landlord's name, address, and telephone number below:		<b>13. AUTHORIZED CONTACT FOR THIS QUESTIONNAIRE</b>  Name Title Telephone Number Fax Number e-mail	
<b>14. VENDOR'S BUSINESS ENTITY IS (please check appropriate box and provide additional information):</b>			
a) <input type="checkbox"/> Business Corporation	Date of Incorporation	State of Incorporation*  Charities Registration Number	
b) <input type="checkbox"/> Sole Proprietor	Date Established		
c) <input type="checkbox"/> General Partnership	Date Established		
d) <input type="checkbox"/> Not-for-Profit Corporation	Date of Incorporation	State of Incorporation*  Charities Registration Number	
e) <input type="checkbox"/> Limited Liability Company (LLC)	Date Established		
f) <input type="checkbox"/> Limited Liability Partnership	Date Established		
g) <input type="checkbox"/> Other - Specify:	Date Established	Jurisdiction Filed (if applicable)	
* If not incorporated in New York State, please provide a copy of authorization to do business in New York.			
<b>15. PRIMARY BUSINESS ACTIVITY - (Please identify the primary business categories, products or services provided by your business)</b>			
<b>16. NAME OF WORKERS' COMPENSATION INSURANCE CARRIER:</b>			
<b>17. LIST ALL OF THE VENDOR'S PRINCIPAL OWNERS AND THE THREE OFFICERS WHO DIRECT THE DAILY OPERATIONS OF THE VENDOR (Attach additional pages if necessary):</b>			
<b>a) NAME (print)</b>	<b>TITLE</b>	<b>b) NAME (print)</b>	<b>TITLE</b>
<b>c) NAME (print)</b>	<b>TITLE</b>	<b>d) NAME (print)</b>	<b>TITLE</b>

**STATE OF NEW YORK**  
**VENDOR RESPONSIBILITY QUESTIONNAIRE**

FEIN #

**A DETAILED EXPLANATION IS REQUIRED FOR EACH QUESTION ANSWERED WITH A "YES," AND MUST BE PROVIDED AS AN ATTACHMENT TO THE COMPLETED QUESTIONNAIRE. YOU MUST PROVIDE ADEQUATE DETAILS OR DOCUMENTS TO AID THE CONTRACTING AGENCY IN MAKING A DETERMINATION OF VENDOR RESPONSIBILITY. PLEASE NUMBER EACH RESPONSE TO MATCH THE QUESTION NUMBER.**

<p>18. Is the vendor certified in New York State as a (check please):</p> <p><input type="checkbox"/> Minority Business Enterprise (MBE)  <input type="checkbox"/> Women's Business Enterprise (WBE)  <input type="checkbox"/> Disadvantaged Business Enterprise (DBE)?</p> <p><i>Please provide a copy of any of the above certifications that apply.</i></p>	<input type="checkbox"/> Yes <input type="checkbox"/> No
<p>19. Does the vendor use, or has it used in the past ten (10) years, any other Business Name, FEIN, or D/B/A other than those listed in items 2-4 above?</p> <p><i>List all other business name(s), Federal Employer Identification Number(s) or any D/B/A names and the dates that these names or numbers were/are in use. Explain the relationship to the vendor.</i></p>	
<p>20. Are there any individuals now serving in a managerial or consulting capacity to the vendor, including principal owners and officers, who now serve or in the past three (3) years have served as:</p> <p>a) An elected or appointed public official or officer?</p> <p><i>List each individual's name, business title, the name of the organization and position elected or appointed to, and dates of service.</i></p> <p>b) A full or part-time employee in a New York State agency or as a consultant, in their individual capacity, to any New York State agency?</p> <p><i>List each individual's name, business title or consulting capacity and the New York State agency name, and employment position with applicable service dates.</i></p> <p>c) If yes to item #20b, did this individual perform services related to the solicitation, negotiation, operation and/or administration of public contracts for the contracting agency?</p> <p><i>List each individual's name, business title or consulting capacity and the New York State agency name, and consulting/advisory position with applicable service dates. List each contract name and assigned NYS number.</i></p> <p>d) An officer of any political party organization in New York State, whether paid or unpaid?</p> <p><i>List each individual's name, business title or consulting capacity and the official political party position held with applicable service dates.</i></p>	

**STATE OF NEW YORK**  
**VENDOR RESPONSIBILITY QUESTIONNAIRE**

FEIN #

<p>21. Within the past five (5) years, has the vendor, any individuals serving in managerial or consulting capacity, principal owners, officers, major stockholder(s) (10% or more of the voting shares for publicly traded companies, 25% or more of the shares for all other companies), affiliate<sup>1</sup> or any person involved in the bidding or contracting process:</p> <p>a) 1. been suspended, debarred or terminated by a local, state or federal authority in connection with a contract or contracting process; <input type="checkbox"/> Yes <input type="checkbox"/> No          2. been disqualified for cause as a bidder on any permit, license, concession franchise or lease;          3. entered into an agreement to a voluntary exclusion from bidding/contracting;          4. had a bid rejected on a New York State contract for failure to comply with the MacBride Fair Employment Principles;          5. had a low bid rejected on a local, state or federal contract for failure to meet statutory affirmative action or M/WBE requirements on a previously held contract;          6. had status as a Women's Business Enterprise, Minority Business Enterprise or Disadvantaged Business Enterprise denied, de-certified, revoked or forfeited;          7. been subject to an administrative proceeding or civil action seeking specific performance or restitution in connection with any local, state or federal government contract;          8. been denied an award of a local, state or federal government contract, had a contract suspended or had a contract terminated for non-responsibility; or          9. had a local, state or federal government contract suspended or terminated for cause prior to the completion of the term of the contract?</p> <p>b) been indicted, convicted, received a judgment against them or a grant of immunity for any business-related conduct constituting a crime under local, state or federal law including but not limited to, fraud, extortion, bribery, racketeering, price-fixing, bid collusion or any crime related to truthfulness and/or business conduct?</p> <p>c) been issued a citation, notice, violation order, or are pending an administrative hearing or proceeding or determination for violations of:</p> <ol style="list-style-type: none"> <li>1. federal, state or local health laws, rules or regulations, including but not limited to Occupational Safety &amp; Health Administration (OSHA) or New York State labor law;</li> <li>2. state or federal environmental laws;</li> <li>3. unemployment insurance or workers' compensation coverage or claim requirements;</li> <li>4. Employee Retirement Income Security Act (ERISA);</li> <li>5. federal, state or local human rights laws;</li> <li>6. civil rights laws;</li> <li>7. federal or state security laws;</li> </ol>	
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**STATE OF NEW YORK**  
**VENDOR RESPONSIBILITY QUESTIONNAIRE**

FEIN #

8. federal Immigration and Naturalization Services (INS) and Alienage laws;  
 9. state or federal anti-trust laws; or  
 10. charity or consumer laws?

*For any of the above, detail the situation(s), the date(s), the name(s), title(s), address(es) of any individuals involved and, if applicable, any contracting agency, specific details related to the situation(s) and any corrective action(s) taken by the vendor.*

22. In the past three (3) years, has the vendor or its affiliates<sup>1</sup> had any claims, judgments, injunctions, liens, fines or penalties secured by any governmental agency?  Yes  No

*Indicate if this is applicable to the submitting vendor or affiliate. State whether the situation(s) was a claim, judgment, injunction, lien or other with an explanation. Provide the name(s) and address(es) of the agency, the amount of the original obligation and outstanding balance. If any of these items are open, unsatisfied, indicate the status of each item as "open" or "unsatisfied."*

23. Has the vendor (for profit and not-for profit corporations) or its affiliates<sup>1</sup>, in the past three (3) years, had any governmental audits that revealed material weaknesses in its system of internal controls, compliance with contractual agreements and/or laws and regulations or any material disallowances?  Yes  No

*Indicate if this is applicable to the submitting vendor or affiliate. Detail the type of material weakness found or the situation(s) that gave rise to the disallowance, any corrective action taken by the vendor and the name of the auditing agency.*

24. Is the vendor exempt from income taxes under the Internal Revenue Code?  Yes  No  
*Indicate the reason for the exemption and provide a copy of any supporting information.*

25. During the past three (3) years, has the vendor failed to:  
 a) file returns or pay any applicable federal, state or city taxes?  Yes  No  
*Identify the taxing jurisdiction, type of tax, liability year(s), and tax liability amount the vendor failed to file/pay and the current status of the liability.*  
 b) file returns or pay New York State unemployment insurance?  Yes  No  
*Indicate the years the vendor failed to file/pay the insurance and the current status of the liability.*

26. Have any bankruptcy proceedings been initiated by or against the vendor or its affiliates<sup>1</sup> within the past seven (7) years (whether or not closed) or is any bankruptcy proceeding pending by or against the vendor or its affiliates regardless of the date of filing?  Yes  No

*Indicate if this is applicable to the submitting vendor or affiliate. If it is an affiliate, include the affiliate's name and FEIN. Provide the court name, address and docket number. Indicate if the proceedings have been initiated, remain pending or have been closed. If closed, provide the date closed.*

## STATE OF NEW YORK

## VENDOR RESPONSIBILITY QUESTIONNAIRE

FEIN #

27. Is the vendor currently insolvent, or does vendor currently have reason to believe that an involuntary bankruptcy proceeding may be brought against it?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>Provide financial information to support the vendor's current position, for example, Current Ratio, Debt Ratio, Age of Accounts Payable, Cash Flow and any documents that will provide the agency with an understanding of the vendor's situation.</i>	
28. Has the vendor been a contractor or subcontractor on any contract with any New York State agency in the past five (5) years?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<i>List the agency name, address, and contract effective dates. Also provide state contract identification number, if known.</i>	
29. In the past five (5) years, has the vendor or any affiliates <sup>1</sup> :	<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> <li>a) defaulted or been terminated on, or had its surety called upon to complete, any contract (public or private) awarded;</li> <li>b) received an overall unsatisfactory performance assessment from any government agency on any contract; or</li> <li>c) had any liens or claims over \$25,000 filed against the firm which remain undischarged or were unsatisfied for more than 90 days ?</li> </ul>	
<i>Indicate if this is applicable to the submitting vendor or affiliate. Detail the situation(s) that gave rise to the negative action, any corrective action taken by the vendor and the name of the contracting agency.</i>	

<sup>1</sup> "Affiliate" meaning: (a) any entity in which the vendor owns more than 50% of the voting stock; (b) any individual, entity or group of principal owners or officers who own more than 50% of the voting stock of the vendor; or (c) any entity whose voting stock is more than 50% owned by the same individual, entity or group described in clause (b). In addition, if a vendor owns less than 50% of the voting stock of another entity, but directs or has the right to direct such entity's daily operations, that entity will be an "affiliate" for purposes of this questionnaire.

**FEIN #**

**CERTIFICATION:**

The undersigned: recognizes that this questionnaire is submitted for the express purpose of assisting the State of New York or its agencies or political subdivisions in making a determination regarding an award of contract or approval of a subcontract; acknowledges that the State or its agencies and political subdivisions may in its discretion, by means which it may choose, verify the truth and accuracy of all statements made herein; acknowledges that intentional submission of false or misleading information may constitute a felony under Penal Law Section 210.40 or a misdemeanor under Penal Law Section 210.35 or Section 210.45, and may also be punishable by a fine and/or imprisonment of up to five years under 18 USC Section 1001 and may result in contract termination; and states that the information submitted in this questionnaire and any attached pages is true, accurate and complete.

The undersigned certifies that he/she:

- has not altered the content of the questions in the questionnaire in any manner;
- has read and understands all of the items contained in the questionnaire and any pages attached by the submitting vendor;
- has supplied full and complete responses to each item therein to the best of his/her knowledge, information and belief;
- is knowledgeable about the submitting vendor's business and operations;
- understands that New York State will rely on the information supplied in this questionnaire when entering into a contract with the vendor; and
- is under duty to notify the procuring State Agency of any material changes to the vendor's responses herein prior to the State Comptroller's approval of the contract.

**Name of Business**

Signature of Owner/Officer \_\_\_\_\_

### Address

**Printed Name of Signatory**

City, State, Zip

### Title

Sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_;

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**Notary Public**

Print Name

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**Signature**

Date

## APPENDIX A

### STANDARD CLAUSES FOR NEW YORK STATE CONTRACTS

[Attached behind.]

**NEW YORK STATE OFFICE OF GENERAL SERVICES  
PROCUREMENT SERVICES GROUP**

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**APPENDIX A**

**STANDARD CLAUSES FOR NEW YORK STATE CONTRACTS**

**PLEASE RETAIN THIS DOCUMENT  
FOR FUTURE REFERENCE.**

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**STANDARD CLAUSES FOR NYS CONTRACTS**

The parties to the attached contract, license, lease, amendment or other agreement of any kind (hereinafter, "the contract" or "this contract") agree to be bound by the following clauses which are hereby made a part of the contract (the word "Contractor" herein refers to any party other than the State, whether a contractor, licensor, licensee, lessor, lessee or any other party):

**1. EXECUTORY CLAUSE.** In accordance with Section 41 of the State Finance Law, the State shall have no liability under this contract to the Contractor or to anyone else beyond funds appropriated and available for this contract.

**2. NON-ASSIGNMENT CLAUSE.** In accordance with Section 138 of the State Finance Law, this contract may not be assigned by the Contractor or its right, title or interest therein assigned, transferred, conveyed, sublet or otherwise disposed of without the previous consent, in writing, of the State and any attempts to assign the contract without the State's written consent are null and void. The Contractor may, however, assign its right to receive payment without the State's prior written consent unless this contract concerns Certificates of Participation pursuant to Article 5-A of the State Finance Law.

**3. COMPTROLLER'S APPROVAL.** In accordance with Section 112 of the State Finance Law (or, if this contract is with the State University or City University of New York, Section 355 or Section 6218 of the Education Law), if this contract exceeds \$50,000 (or the minimum thresholds agreed to by the Office of the State Comptroller for certain S.U.N.Y. and C.U.N.Y. contracts), or if this is an amendment for any amount to a contract which, as so amended, exceeds said statutory amount, or if, by this contract, the State agrees to give something other than money when the value or reasonably estimated value of such consideration exceeds \$10,000, it shall not be valid, effective or binding upon the State until it has been approved by the State Comptroller and filed in his office. Comptroller's approval of contracts let by the Office of General Services is required when such contracts exceed \$85,000 (State Finance Law Section 163.6.a).

**4. WORKERS' COMPENSATION BENEFITS.** In accordance with Section 142 of the State Finance Law, this contract shall be void and of no force and effect unless the Contractor shall provide and maintain coverage during the life of this contract for the benefit of such employees as are required to be covered by the provisions of the Workers' Compensation Law.

**5. NON-DISCRIMINATION REQUIREMENTS.** To the extent required by Article 15 of the Executive Law (also known as the Human Rights Law) and all other State and Federal statutory and constitutional non-discrimination provisions, the Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, sex, national origin, sexual orientation, age, disability, genetic predisposition or carrier status, or marital status. Furthermore, in accordance with Section 220-e of the Labor Law, if this is a contract for the construction, alteration or repair of any public building or public work or for the manufacture, sale or distribution of materials, equipment or supplies, and to the extent that this contract shall be performed within the State of New York, Contractor agrees that neither it nor its subcontractors shall, by reason of race, creed, color, disability, sex, or national origin: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this contract. If this is a building service contract as defined in Section 230 of the Labor Law, then, in accordance with Section 239 thereof, Contractor agrees that neither it nor its subcontractors shall by reason of race, creed, color, national origin, age, sex or disability: (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b)

discriminate against or intimidate any employee hired for the performance of work under this contract. Contractor is subject to fines of \$50.00 per person per day for any violation of Section 220-e or Section 239 as well as possible termination of this contract and forfeiture of all moneys due hereunder for a second or subsequent violation.

**6. WAGE AND HOURS PROVISIONS.** If this is a public work contract covered by Article 8 of the Labor Law or a building service contract covered by Article 9 thereof, neither Contractor's employees nor the employees of its subcontractors may be required or permitted to work more than the number of hours or days stated in said statutes, except as otherwise provided in the Labor Law and as set forth in prevailing wage and supplement schedules issued by the State Labor Department. Furthermore, Contractor and its subcontractors must pay at least the prevailing wage rate and pay or provide the prevailing supplements, including the premium rates for overtime pay, as determined by the State Labor Department in accordance with the Labor Law.

**7. NON-COLLUSIVE BIDDING CERTIFICATION.** In accordance with Section 139-d of the State Finance Law, if this contract was awarded based upon the submission of bids, Contractor affirms, under penalty of perjury, that its bid was arrived at independently and without collusion aimed at restricting competition. Contractor further affirms that, at the time Contractor submitted its bid, an authorized and responsible person executed and delivered to the State a non-collusive bidding certification on Contractor's behalf.

**8. INTERNATIONAL BOYCOTT PROHIBITION.** In accordance with Section 220-f of the Labor Law and Section 139-h of the State Finance Law, if this contract exceeds \$5,000, the Contractor agrees, as a material condition of the contract, that neither the Contractor nor any substantially owned or affiliated person, firm, partnership or corporation has participated, is participating, or shall participate in an international boycott in violation of the federal Export Administration Act of 1979 (50 USC App. Sections 2401 et seq.) or regulations thereunder. If such Contractor, or any of the aforesaid affiliates of Contractor, is convicted or is otherwise found to have violated said laws or regulations upon the final determination of the United States Commerce Department or any other appropriate agency of the United States subsequent to the contract's execution, such contract, amendment or modification thereto shall be rendered forfeit and void. The Contractor shall so notify the State Comptroller within five (5) business days of such conviction, determination or disposition of appeal (2NYCRR 105.4).

**9. SET-OFF RIGHTS.** The State shall have all of its common law, equitable and statutory rights of set-off. These rights shall include, but not be limited to, the State's option to withhold for the purposes of set-off any moneys due to the Contractor under this contract up to any amounts due and owing to the State with regard to this contract, any other contract with any State department or agency, including any contract for a term commencing prior to the term of this contract, plus any amounts due and owing to the State for any other reason including, without limitation, tax delinquencies, fee delinquencies or monetary penalties relative thereto. The State shall exercise its set-off rights in accordance with normal State practices including, in cases of set-off pursuant to an audit, the finalization of such audit by the State agency, its representatives, or the State Comptroller.

**10. RECORDS.** The Contractor shall establish and maintain complete and accurate books, records, documents, accounts and other evidence directly pertinent to performance under this contract (hereinafter, collectively, "the Records"). The Records must be kept for the balance of the calendar year in which they were made and for six (6) additional years thereafter. The State Comptroller, the Attorney General and any other person or entity authorized to conduct an examination, as well as the agency or agencies involved in this contract, shall have access to the

Records during normal business hours at an office of the Contractor within the State of New York or, if no such office is available, at a mutually agreeable and reasonable venue within the State, for the term specified above for the purposes of inspection, auditing and copying. The State shall take reasonable steps to protect from public disclosure any of the Records which are exempt from disclosure under Section 87 of the Public Officers Law (the "Statute") provided that: (i) the Contractor shall timely inform an appropriate State official, in writing, that said records should not be disclosed; and (ii) said records shall be sufficiently identified; and (iii) designation of said records as exempt under the Statute is reasonable. Nothing contained herein shall diminish, or in any way adversely affect, the State's right to discovery in any pending or future litigation.

#### **11. IDENTIFYING INFORMATION AND PRIVACY**

**NOTIFICATION.** (a) **FEDERAL EMPLOYER IDENTIFICATION NUMBER** and/or **FEDERAL SOCIAL SECURITY NUMBER**. All invoices or New York State standard vouchers submitted for payment for the sale of goods or services or the lease of real or personal property to a New York State agency must include the payee's identification number, i.e., the seller's or lessor's identification number. The number is either the payee's Federal employer identification number or Federal social security number, or both such numbers when the payee has both such numbers. Failure to include this number or numbers may delay payment. Where the payee does not have such number or numbers, the payee, on its invoice or New York State standard voucher, must give the reason or reasons why the payee does not have such number or numbers.

(b) **PRIVACY NOTIFICATION.** (1) The authority to request the above personal information from a seller of goods or services or a lessor of real or personal property, and the authority to maintain such information, is found in Section 5 of the State Tax Law. Disclosure of this information by the seller or lessor to the State is mandatory. The principal purpose for which the information is collected is to enable the State to identify individuals, businesses and others who have been delinquent in filing tax returns or may have understated their tax liabilities and to generally identify persons affected by the taxes administered by the Commissioner of Taxation and Finance. The information will be used for tax administration purposes and for any other purpose authorized by law.

(2) The personal information is requested by the purchasing unit of the agency contracting to purchase the goods or services or lease the real or personal property covered by this contract or lease. The information is maintained in New York State's Central Accounting System by the Director of Accounting Operations, Office of the State Comptroller, 110 State Street, Albany, New York 12236.

#### **12. EQUAL EMPLOYMENT OPPORTUNITIES FOR**

**MINORITIES AND WOMEN.** In accordance with Section 312 of the Executive Law, if this contract is: (i) a written agreement or purchase order instrument, providing for a total expenditure in excess of \$25,000.00, whereby a contracting agency is committed to expend or does expend funds in return for labor, services, supplies, equipment, materials or any combination of the foregoing, to be performed for, or rendered or furnished to the contracting agency; or (ii) a written agreement in excess of \$100,000.00 whereby a contracting agency is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon; or (iii) a written agreement in excess of \$100,000.00 whereby the owner of a State assisted housing project is committed to expend or does expend funds for the acquisition, construction, demolition, replacement, major repair or renovation of real property and improvements thereon for such project, then:

(a) The Contractor will not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status, and will undertake or continue existing programs of affirmative action to ensure that minority group members and women are afforded equal employment opportunities

without discrimination. Affirmative action shall mean recruitment, employment, job assignment, promotion, upgradings, demotion, transfer, layoff, or termination and rates of pay or other forms of compensation;

(b) at the request of the contracting agency, the Contractor shall request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, labor union or representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will affirmatively cooperate in the implementation of the contractor's obligations herein; and

(c) the Contractor shall state, in all solicitations or advertisements for employees, that, in the performance of the State contract, all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status.

Contractor will include the provisions of "a", "b", and "c" above, in every subcontract over \$25,000.00 for the construction, demolition, replacement, major repair, renovation, planning or design of real property and improvements thereon (the "Work") except where the Work is for the beneficial use of the Contractor. Section 312 does not apply to: (i) work, goods or services unrelated to this contract; or (ii) employment outside New York State; or (iii) banking services, insurance policies or the sale of securities. The State shall consider compliance by a contractor or subcontractor with the requirements of any federal law concerning equal employment opportunity which effectuates the purpose of this section. The contracting agency shall determine whether the imposition of the requirements of the provisions hereof duplicate or conflict with any such federal law and if such duplication or conflict exists, the contracting agency shall waive the applicability of Section 312 to the extent of such duplication or conflict. Contractor will comply with all duly promulgated and lawful rules and regulations of the Governor's Office of Minority and Women's Business Development pertaining hereto.

**13. CONFLICTING TERMS.** In the event of a conflict between the terms of the contract (including any and all attachments thereto and amendments thereof) and the terms of this Appendix A, the terms of this Appendix A shall control.

**14. GOVERNING LAW.** This contract shall be governed by the laws of the State of New York except where the Federal supremacy clause requires otherwise.

**15. LATE PAYMENT.** Timeliness of payment and any interest to be paid to Contractor for late payment shall be governed by Article 11-A of the State Finance Law to the extent required by law.

**16. NO ARBITRATION.** Disputes involving this contract, including the breach or alleged breach thereof, may not be submitted to binding arbitration (except where statutorily authorized), but must, instead, be heard in a court of competent jurisdiction of the State of New York.

**17. SERVICE OF PROCESS.** In addition to the methods of service allowed by the State Civil Practice Law & Rules ("CPLR"), Contractor hereby consents to service of process upon it by registered or certified mail, return receipt requested. Service hereunder shall be complete upon Contractor's actual receipt of process or upon the State's receipt of the return thereof by the United States Postal Service as refused or undeliverable. Contractor must promptly notify the State, in writing, of each and every change of address to which service of process can be made. Service by the State to the last known address shall be sufficient. Contractor will have thirty (30) calendar days after service hereunder is complete in which to respond.

**18. PROHIBITION ON PURCHASE OF TROPICAL HARDWOODS.**

**HARDWOODS.** The Contractor certifies and warrants that all wood products to be used under this contract award will be in accordance with, but not limited to, the specifications and provisions of State Finance Law §165. (Use of Tropical Hardwoods) which prohibits purchase and use of tropical hardwoods, unless specifically exempted, by the State or any governmental agency or political subdivision or public benefit corporation. Qualification for an exemption under this law will be the responsibility of the contractor to establish to meet with the approval of the State.

In addition, when any portion of this contract involving the use of woods, whether supply or installation, is to be performed by any subcontractor, the prime Contractor will indicate and certify in the submitted bid proposal that the subcontractor has been informed and is in compliance with specifications and provisions regarding use of tropical hardwoods as detailed in §165 State Finance Law. Any such use must meet with the approval of the State; otherwise, the bid may not be considered responsive. Under bidder certifications, proof of qualification for exemption will be the responsibility of the Contractor to meet with the approval of the State.

**19. MACBRIDE FAIR EMPLOYMENT PRINCIPLES.** In accordance with the MacBride Fair Employment Principles (Chapter 807 of the Laws of 1992), the Contractor hereby stipulates that the Contractor either (a) has no business operations in Northern Ireland, or (b) shall take lawful steps in good faith to conduct any business operations in Northern Ireland in accordance with the MacBride Fair Employment Principles (as described in Section 165 of the New York State Finance Law), and shall permit independent monitoring of compliance with such principles.

**20. OMNIBUS PROCUREMENT ACT OF 1992.** It is the policy of New York State to maximize opportunities for the participation of New York State business enterprises, including minority and women-owned business enterprises as bidders, subcontractors and suppliers on its procurement contracts.

Information on the availability of New York State subcontractors and suppliers is available from:

NYS Department of Economic Development  
Division for Small Business  
30 South Pearl St -- 7<sup>th</sup> Floor  
Albany, New York 12245  
Telephone: 518-292-5220  
Fax: 518-292-5884  
<http://www.empire.state.ny.us>

A directory of certified minority and women-owned business enterprises is available from:

NYS Department of Economic Development  
Division of Minority and Women's Business Development  
30 South Pearl St -- 2nd Floor  
Albany, New York 12245  
Telephone: 518-292-5250  
Fax: 518-292-5803  
<http://www.empire.state.ny.us>

The Omnibus Procurement Act of 1992 requires that by signing this bid proposal or contract, as applicable, Contractors certify that whenever the total bid amount is greater than \$1 million:

(a) The Contractor has made reasonable efforts to encourage the participation of New York State Business Enterprises as suppliers and subcontractors, including certified minority and women-owned business enterprises, on this project, and has retained the documentation of these efforts to be provided upon request to the State;

(b) The Contractor has complied with the Federal Equal Opportunity Act of 1972 (P.L. 92-261), as amended;

(c) The Contractor agrees to make reasonable efforts to provide notification to New York State residents of employment opportunities on this project through listing any such positions with the Job Service Division of the New York State Department of Labor, or providing such notification in such manner as is consistent with existing collective bargaining contracts or agreements. The Contractor agrees to document these efforts and to provide said documentation to the State upon request; and

(d) The Contractor acknowledges notice that the State may seek to obtain offset credits from foreign countries as a result of this contract and agrees to cooperate with the State in these efforts.

**21. RECIPROCITY AND SANCTIONS PROVISIONS.** Bidders are hereby notified that if their principal place of business is located in a country, nation, province, state or political subdivision that penalizes New York State vendors, and if the goods or services they offer will be substantially produced or performed outside New York State, the Omnibus Procurement Act 1994 and 2000 amendments (Chapter 684 and Chapter 383, respectively) require that they be denied contracts which they would otherwise obtain. NOTE: As of May 15, 2002, the list of discriminatory jurisdictions subject to this provision includes the states of South Carolina, Alaska, West Virginia, Wyoming, Louisiana and Hawaii. Contact NYS Department of Economic Development for a current list of jurisdictions subject to this provision.

**22. PURCHASES OF APPAREL.** In accordance with State Finance Law 162 (4-a), the State shall not purchase any apparel from any vendor unable or unwilling to certify that: (i) such apparel was manufactured in compliance with all applicable labor and occupational safety laws, including, but not limited to, child labor laws, wage and hours laws and workplace safety laws, and (ii) vendor will supply, with its bid (or, if not a bid situation, prior to or at the time of signing a contract with the State), if known, the names and addresses of each subcontractor and a list of all manufacturing plants to be utilized by the bidder.

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